Service Manual

MF6500 Series

Canon

Feb 22 2006

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Application

This manual has been issued by Canon Inc. for qualified persons to learn technical theory, installation, maintenance, and repair of products. This manual covers all localities where the products are sold. For this reason, there may be information in this manual that does not apply to your locality.

Corrections

This manual may contain technical inaccuracies or typographical errors due to improvements or changes in products. When changes occur in applicable products or in the contents of this manual, Canon will release technical information as the need arises. In the event of major changes in the contents of this manual over a long or short period, Canon will issue a new edition of this manual.

The following paragraph does not apply to any countries where such provisions are inconsistent with local law.

Trademarks

The product names and company names used in this manual are the registered trademarks of the individual companies.

Copyright

This manual is copyrighted with all rights reserved. Under the copyright laws, this manual may not be copied, reproduced or translated into another language, in whole or in part, without the written consent of Canon Inc.

COPYRIGHT © 2001 CANON INC.

Printed in Japan

Caution

Use of this manual should be strictly supervised to avoid disclosure of confidential information.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Symbols Used

This documentation uses the following symbols to indicate special information:

Symbol	Description
	Indicates an item of a non-specific nature, possibly classified as Note, Caution, or Warning.
	Indicates an item requiring care to avoid electric shocks.
	Indicates an item requiring care to avoid combustion (fire).
	Indicates an item prohibiting disassembly to avoid electric shocks or problems.
	Indicates an item requiring disconnection of the power plug from the electric outlet.
Memo	Indicates an item intended to provide notes assisting the understanding of the topic in question.
REF.	Indicates an item of reference assisting the understanding of the topic in question.
	Provides a description of a service mode.
	Provides a description of the nature of an error indication.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

The following rules apply throughout this Service Manual:

1. Each chapter contains sections explaining the purpose of specific functions and the relationship between electrical and mechanical systems with reference to the timing of operation.
   In the diagrams, ⊥■■■⊥ represents the path of mechanical drive; where a signal name accompanies the symbol , the arrow ⟶ indicates the direction of the electric signal.
   The expression "turn on the power" means flipping on the power switch, closing the front door, and closing the delivery unit door, which results in supplying the machine with power.
2. In the digital circuits, '1'is used to indicate that the voltage level of a given signal is "High", while '0' is used to indicate "Low".(The voltage value, however, differs from circuit to circuit.) In addition, the asterisk (*) as in "DRMD*" indicates that the DRMD signal goes on when '0'.
   In practically all cases, the internal mechanisms of a microprocessor cannot be checked in the field. Therefore, the operations of the microprocessors used in the machines are not discussed: they are explained in terms of from sensors to the input of the DC controller PCB and from the output of the DC controller PCB to the loads.

The descriptions in this Service Manual are subject to change without notice for product improvement or other purposes, and major changes will be communicated in the form of Service Information bulletins.
All service persons are expected to have a good understanding of the contents of this Service Manual and all relevant Service Information bulletins and be able to identify and isolate faults in the machine."

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

Chapter 1 Introduction

1.1 System Construction 1- 1
1.1.1 System Construction 1- 1
1.2 Product Specifications 1- 2
1.2.1 Names of Parts 1- 2
1.2.1.1 External View (Front) 1- 2
1.2.1.2 External View (Rear) 1- 2
1.2.1.3 Cross-Section (Main body) 1- 3
1.2.1.4 Cross Section (ADF) 1- 3
1.2.2 Using the Machine 1- 5
1.2.2.1 Turning On the Power Switch 1- 5
1.2.2.2 When Turning Off the Main Power Switch 1- 6
1.2.2.3 Control Panel 1- 8
1.2.3 User Mode Items 1- 9
1.2.3.1 COMMON SETTINGS 1- 9
1.2.3.2 COPY SETTINGS 1- 9
1.2.3.3 FAX SETTINGS 1- 10
1.2.3.4 ADDRESS BOOK SET. 1- 10
1.2.3.5 PRINTER SETTINGS 1- 10
1.2.3.6 TIMER SETTINGS 1- 11
1.2.3.7 ADJUST./CLEANING 1- 11
1.2.3.8 REPORT SETTINGS 1- 11
1.2.3.9 SYSTEM SETTINGS 1- 12
1.2.4 Maintenance by the User 1- 13
1.2.4.1 User Maintenance Items 1- 13
1.2.4.2 Cleaning 1- 13
1.2.5 Safety 1- 14
1.2.5.1 Safety of the Laser Light 1- 14
1.2.5.2 Safety of Toner 1- 14
1.2.5.3 CDRH Regulations 1- 14
1.2.5.4 Handling the Laser Unit 1- 15
1.2.5.5 Point to Note about Fire 1- 15
1.2.5.6 Cautions as to the replacement and disposal of lithium battery 1- 15
1.2.5.7 Storing and Handling the Cartridge Before Unpacking 1- 16
1.2.5.8 Storing or Handling the Cartridge After Unpacking 1- 16
1.2.6 Product Specifications 1- 17
1.2.6.1 Product Specifications 1- 17
1.2.6.2 ADF Specifications 1- 18
1.2.7 Function List 1- 18
1.2.7.1 Printing Speed 1- 18
1.2.7.2 Types of Paper 1- 19

Chapter 2 Basic Operation

2.1 Construction 2- 1
2.1.1 Functional Construction 2- 1
2.1.2 Functional Block Diagram 2- 2
2.1.3 Image Processor PCB 2- 2
2.1.4 DC Controller PCB 2- 3
2.1.5 Analog Processor PCB 2- 4
2.1.6 Power Supply PCB 2- 4
2.1.7 Relay PCB 2- 4
2.1.8 Control Panel PCB 2- 4

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

2.1.9 Network PCB Åiif equipped with network functionsÅj 2- 4
2.1.10 NCU PCB (if equipped with fax functions) 2- 4
2.1.11 Modular Jack PCB (if equipped with fax functions) 2- 4
2.2 Basic Sequence 2- 4
2.2.1 Basic Sequence 2- 4

Chapter 3 Original Exposure System

3.1 Basic Constraction 3- 1
3.1.1 Specifications, Control Methods, and Functions 3- 1
3.1.2 Major Components 3- 1
3.2 Basic Sequence 3- 2
3.2.1 Basic Sequence at Power-on 3- 2
3.2.2 Basic Sequence after Depression of Start Key (Book mode, One Sheet of original) 3- 2
3.2.3 Basic Sequence after Depression of Start Key (ADF Mode, One Sheet of Original) 3- 3
3.3 Various Control 3- 3
3.3.1 Enlargement/Reduction 3- 3
3.3.1.1 Magnification Change in Vertical Scan Direction 3- 3
3.3.1.2 Magnification Change in Horizontal Scan Direction 3- 3
3.3.2 Dirt Sensor Control 3- 4
3.3.2.1 Outline 3- 4
3.4 Parts Replacement Procedure 3- 5
3.4.1 Copyboard Glass 3- 5
3.4.1.1 Removing the Copyboard Glass 3- 5
3.4.2 Analog Processor PCB 3- 5
3.4.2.1 Removing the Analog Processor PCB 3- 5
3.4.3 Reader Motor 3- 5
3.4.3.1 Removing the Reader Motor 3- 5
3.4.4 Contact Sensor 3- 5
3.4.4.1 Removing the Contact Sensor 3- 5
3.4.4.2 Procedure after Replacing the CS 3- 6
3.4.5 Reader Home Position Sensor 3- 6
3.4.5.1 Removing the Reader Home Position Sensor 3- 6

Chapter 4 Original Feeding System

4.1 Basic Constraction 4- 1
4.1.1 Outline 4- 1
4.1.2 Drive Mechanism 4- 1
4.2 Basic Operation 4- 2
4.2.1 Outline of Operation Mode 4- 2
4.2.2 Document Size Detection 4- 3
4.2.3 Paper Pickup Operation 4- 4
4.2.4 Reversal Operation 4- 4
4.2.5 Delivery Operation 4- 5
4.3 Detection Jams 4- 6
4.3.1 Outline 4- 6
4.4 ADF 4- 7
4.4.1 ADF 4- 7
4.4.1.1 Removing the ADF 4- 7
4.4.2 External Covers 4- 7
4.4.2.1 Removing the Front Cover 4- 7
4.4.2.2 Removing the Rear Cover 4- 7
4.4.2.3 Detaching the Open/Close cover 4- 8
4.4.2.4 Removing the Pickup Tray 4- 8
4.4.3 Feed Frame Unit 4- 9
4.4.3.1 Removing the Feed Frame Unit 4- 9

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

4.4.4 Drive Unit 4- 9
4.4.4.1 Removing the Drive Unit 4- 9
4.4.5 Pick-up/Feed Roller Unit 4- 9
4.4.5.1 Removing the Pickup/Feed Roller Unit 4- 9
4.4.6 Pick-up Roller 4- 9
4.4.6.1 Removing the Pickup Roller 4- 9
4.4.7 Feed Roller 4- 10
4.4.7.1 Removing the Feed Roller 4- 10
4.4.8 ADF Motor 4- 10
4.4.8.1 Removing the ADF Motor 4- 10
4.4.9 Document Set Sensor 4- 10
4.4.9.1 Removing the Document Set Sensor 4- 10
4.4.10 Document Edge Sensor 4- 11
4.4.10.1 Removing the Original Placement Sensor 4- 11
4.4.11 Registration Sensor 4- 11
4.4.11.1 Removing the Registration Sensor 4- 11
4.4.12 Separation Sensor 4- 11
4.4.12.1 Removing the Separated Paper Sensor 4- 11
4.4.13 Pick-up Solenoid 4- 11
4.4.13.1 Removing the Pickup Solenoid 4- 11
4.4.14 Registration Solenoid 4- 12
4.4.14.1 Removing the Registration Solenoid 4- 12
4.4.15 Release Solenoid 4- 12
4.4.15.1 Removing the Release Solenoid 4- 12
4.4.16 Separation Pad 4- 12
4.4.16.1 Removing the Separation Pad 4- 12

Chapter 5 Laser Exposure

5.1 Overview/Configuration 5- 1
5.1.1 Specifications and Control Mechanism 5- 1
5.1.2 Main Components 5- 2
5.2 Parts Replacement Procedure 5- 3
5.2.1 Laser/Scanner Unit 5- 3
5.2.1.1 Removing the Laser Scanner Unit 5- 3

Chapter 6 Image Formation

6.1 Overview/Configuration 6- 1
6.1.1 Specifications and Control Mechanism 6- 1
6.2 Image Formation Process 6- 1
6.2.1 Reproduction Processes 6- 1
6.3 Parts Replacement Procedure 6- 3
6.3.1 Transfer Charging Roller 6- 3
6.3.1.1 Removing the Transfer Charging Roller 6- 3

Chapter 7 Pickup and Feed System

7.1 Overview/Configuration 7- 1
7.1.1 Outline 7- 1
7.2 Detection Jams 7- 2
7.2.1 Jam Detection Outline 7- 2
7.2.1.1 Outline 7- 2
7.2.1.2 Types of Jams 7- 2
7.3 Cassette Pickup Unit 7- 3
7.3.1 Outline 7- 3
7.3.2 Retry Pickup 7- 3
7.3.3 Detecting the Size of Paper 7- 3

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

7.4 Duplex Unit 7- 4
7.4.1 Outline 7- 4
7.5 Manual Feed Pickup Unit 7- 5
7.5.1 Outline 7- 5
7.5.2 Retry Pickup 7- 5
7.5.3 Detecting the Size of Paper 7- 5
7.6 Parts Replacement Procedure 7- 6
7.6.1 Cassette Pickup Roller 7- 6
7.6.1.1 Removing the Cassette Pickup Roller 7- 6
7.6.2 Cassette Separation Roller 7- 6
7.6.2.1 Removing the Cassette Separation Roller 7- 6
7.6.3 Cassette Paper Sensor 7- 6
7.6.3.1 Removing the Cassette Paper Sensor 7- 6
7.6.4 Cassette Pickup Solenoid 7- 7
7.6.4.1 Removing the Cassette Pickup Solenoid 7- 7
7.6.5 Paper Feed Roller 7- 7
7.6.5.1 Removing the Cassete Feed Roller 7- 7
7.6.6 Manual Pickup Roller 7- 7
7.6.6.1 Removing the Manual Pickup Roller 7- 7
7.6.7 Manual Pickup Sensor 7- 8
7.6.7.1 Removing the Manual Tray Sensor 7- 8
7.6.8 Manual Pickup Solenoid 7- 8
7.6.8.1 Removing the Manual Pickup Solenoid 7- 8
7.6.9 Manual Separation Roller 7- 8
7.6.9.1 Removing the Manual Separation Pad 7- 8
7.6.10 Registration Roller 7- 8
7.6.10.1 Removing the Registration Roller 7- 8
7.6.11 Registration Sensor 7- 9
7.6.11.1 Removing the Registration Sensor 7- 9
7.6.12 Duplex Pick-up Solenoid 7- 10
7.6.12.1 Removing the Duplex Pickup Solenoid 7- 10
7.6.13 Registration Clutch 7- 10
7.6.13.1 Removing the Registration Clutch 7- 10
7.6.14 Main Motor 7- 10
7.6.14.1 Removing the Main Motor 7- 10

Chapter 8 Fixing System

8.1 Overview/Configuration 8- 1
8.1.1 Specifications, Control Mechanisms, and Functions 8- 1
8.1.2 Outline 8- 1
8.2 Various Control Mechanisms 8- 2
8.2.1 Controlling the Temperature of the Fixing Unit 8- 2
8.2.1.1 Outline 8- 2
8.2.2 Controlling the Fixing Film Temperature 8- 2
8.2.2.1 Controlling the Fixing Film Temperature 8- 2
8.2.2.2 Target Temperatures by Mode 8- 2
8.3 Protection Function 8- 3
8.3.1 Outline 8- 3
8.3.2 Failure Detection 8- 3
8.4 Parts Replacement Procedure 8- 4
8.4.1 Fixing Unit 8- 4
8.4.1.1 Removing the Fixing Unit 8- 4
8.4.2 Fixing Film Unit 8- 5
8.4.2.1 Removing the Fixing Film Unit 8- 5
8.4.3 Fixing Pressure Roller 8- 6
8.4.3.1 Removing the Pressure Roller 8- 6

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

8.4.4 Fixing Delivery Paper Sensor 8- 7
8.4.4.1 Removing the Delivery Sensor 8- 7
8.4.5 Delivery Full Sensor 8- 7
8.4.5.1 Removing the Delivery Full Sensor 8- 7

Chapter 9 External and Controls

9.1 Control Panel 9- 1
9.1.1 Outline 9- 1
9.2 Fan 9- 1
9.2.1 Outline 9- 1
9.3 Power Supply 9- 2
9.3.1 Power Supply 9- 2
9.3.1.1 Outline 9- 2
9.3.1.2 Rated Output of the Power Supply PCB 9- 2
9.3.2 Protection Function 9- 2
9.3.2.1 Protective Functions 9- 2
9.4 Parts Replacement Procedure 9- 4
9.4.1 External Cover 9- 4
9.4.1.1 Detaching the Reader Rear Cover (Small) 9- 4
9.4.1.2 Detaching the Reader Rear Cover 9- 4
9.4.1.3 Detaching the Rear Cover 9- 4
9.4.1.4 Detaching the Reader Left Cover 9- 5
9.4.1.5 Detaching the Front-left Cover 9- 5
9.4.1.6 Detaching the Rear-left Cover 9- 5
9.4.1.7 Detaching the Reader Right Cover 9- 5
9.4.1.8 Detaching the Right Cover 9- 6
9.4.1.9 Detaching the Front Cover 9- 7
9.4.1.10 Detaching the Delivery Tray 9- 7
9.4.2 Operation Panel Unit 9- 7
9.4.2.1 Removing the Operation Panel Unit 9- 7
9.4.3 Image Processor PCB 9- 8
9.4.3.1 Removing the Image Processor PCB 9- 8
9.4.3.2 Procedure after Replacing the Image Processor PCB 9- 8
9.4.4 DC Controller PCB 9- 9
9.4.4.1 Removing the DC Controller PCB 9- 9
9.4.5 Powwer Supply PCB 9- 9
9.4.5.1 Removing the Power Supply PCB 9- 9
9.4.6 Relay PCB 9- 9
9.4.6.1 Removing the Relay PCB 9- 9
9.4.7 NCU PCB 9- 9
9.4.7.1 Removing the NCU PCB 9- 9
9.4.8 Modem PCB 9- 10
9.4.8.1 Removing the Modem PCB 9- 10
9.4.9 Modular Jack PCB 9- 10
9.4.9.1 Removing the Modular Jack PCB 9- 10
9.4.10 Network PCB 9- 10
9.4.10.1 Removing the Network PCB 9- 10
9.4.11 Interlock Switch 9- 10
9.4.11.1 Removing the Interlock Switch 9- 10
9.4.12 Fan 9- 10
9.4.12.1 Removing the Heat Discharge Fan 9- 10
9.4.13 Speaker 9- 11
9.4.13.1 Removing the Speaker 9- 11

Chapter 10 Maintenance and Inspection

10.1 Periodically Replaced Parts 10- 1
10.1.1 Periodically Replaced Parts 10- 1

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

10.2 Consumables 10- 1
10.2.1 Durables 10- 1
10.3 Periodical Service 10- 1
10.3.1 Periodeical Service Items 10- 1

Chapter 11 Measurement and Adjustments

11.1 Scanning System 11- 1
11.1.1 Procedure after Replacing the CS 11- 1
11.2 Fixing System 11- 1
11.2.1 ï¾çsê´ÇÃíðêÆ 11- 1
11.3 Electrical Adjustments 11- 1
11.3.1 Procedure after Replacing the Image Processor PCB 11- 1
11.3.2 Actions to Take before All Clearing (Backing up the User Data) 11- 1
11.4 ADF 11- 2
11.4.1 Outline 11- 2
11.4.1.1 Outline 11- 2
11.4.1.2 Preparing a Test Sheet for Adjustment 11- 2
11.4.2 Adjusting the Mechanical System 11- 2
11.4.2.1 Adjusting the Perpendicularity 11- 2
11.4.3 Adjusting the Electrical System 11- 2
11.4.3.1 Adjusting the Magnification 11- 2
11.4.3.2 Adjusting the Horizontal Registration 11- 3
11.4.3.3 Leading edge registration adjustment 11- 3

Chapter 12 Correcting Faulty Images

12.1 Initial Checkup 12- 1
12.1.1 Site Environment 12- 1
12.1.2 Checking the Paper 12- 1
12.1.3 Checking the Placement of Paper 12- 1
12.1.4 Checking the Durables 12- 1
12.1.5 Checking the Units and Functional Systems 12- 1
12.1.6 Others 12- 2
12.2 Outline of Electrical Components 12- 3
12.2.1 Clutch/Solenoid/Motor/Fan 12- 3
12.2.1.1 List of Clutches/Solenoids/Motors/Fans 12- 3
12.2.2 Sensor/Switch 12- 4
12.2.2.1 List of Sensors 12- 4
12.2.3 Others 12- 5
12.2.3.1 List of Lamps, Heaters, and Others 12- 5

Chapter 13 Error Code

13.1 Error Code 13- 1
13.1.1 List of Error Codes 13- 1
13.2 Jam Code 13- 2
13.2.1 Jam Codes (Main body) 13- 2
13.2.2 Jam Codes (ADF) 13- 2
13.3 Fax Error Codes 13- 2
13.3.1 Outline 13- 2
13.3.1.1 Error Code Outline 13- 2
13.3.2 User Error Code 13- 2
13.3.2.1 User Error Code 13- 2
13.3.3 Service Error Code 13- 3
13.3.3.1 Service Error Code 13- 3

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 14 Service Mode

14.1 Service Soft Switch Settings (SSSW) 14- 1
14.1.1 SSSW-SW01: 14- 1
14.1.1.1 List of Functions 14- 1
14.1.1.2 Detailed Discussions of Bit 0 ..... 14- 1
14.1.2 SSSW-SW03 ..... 14- 1
14.1.2.1 List of Functions 14- 1
14.1.2.2 Detailed Discussions of Bit 7 ..... 14- 1
14.1.3 SSSW-SW04 ..... 14- 1
14.1.3.1 List of Functions 14- 1
14.1.3.2 Detailed Discussions of Bit 2 ..... 14- 1
14.1.3.3 Detailed Discussions of Bit 3 ..... 14- 2
14.1.3.4 Detailed Discussions of Bit 4 ..... 14- 2
14.1.3.5 Detailed Discussions of Bit 6 ..... 14- 2
14.1.3.6 Detailed Discussions of Bit 7 ..... 14- 2
14.1.4 SSSW-SW05 ..... 14- 2
14.1.4.1 List of Functions 14- 2
14.1.4.2 Detailed Discussions of Bit 1 ..... 14- 2
14.1.4.3 Detailed Discussions of Bit 2 ..... 14- 2
14.1.5 SSSW-SW12 ..... 14- 2
14.1.5.1 List of Functions 14- 2
14.1.6 SSSW-SW13 ..... 14- 3
14.1.6.1 List of Functions 14- 3
14.1.6.2 Detailed Discussions of Bit 2 ..... 14- 3
14.1.7 SSSW-SW14 ..... 14- 3
14.1.7.1 List of Functions 14- 3
14.1.7.2 Detailed Discussions of Bit 2 ..... 14- 4
14.1.7.3 Detailed Discussions of Bit 4 ..... 14- 4
14.1.8 SSSW-SW28 ..... 14- 4
14.1.8.1 List of Functions 14- 4
14.1.8.2 Detailed Discussions of Bit 0 ..... 14- 4
14.1.8.3 Detailed Discussions of Bit 1 ..... 14- 4
14.1.8.4 Detailed Discussions of Bit 2 ..... 14- 4
14.1.8.5 Detailed Discussions of Bit 3 ..... 14- 4
14.1.8.6 Detailed Discussions of Bit 4 ..... 14- 4
14.1.8.7 Detailed Discussions of Bit 5 ..... 14- 4
14.1.9 SSSW-SW30 ..... 14- 4
14.1.9.1 List of Functions 14- 4
14.1.9.2 Detailed Discussions of Bit 5 ..... 14- 5
14.2 Menu Switch Settings (MENU) 14- 5
14.2.1 Menu Switch Composition 14- 5
14.2.2 <No.005 NL equalizer> 14- 5
14.2.3 <No.006 telephone line monitor> 14- 5
14.2.4 <No.007 ATT transmission level> 14- 5
14.2.5 <No.008 V.34 modulation speed upper limit> 14- 5
14.2.6 <No.009 V.34 data speed upper limit> 14- 5
14.2.7 <No.010 Frequency of the pseudo CI signal> 14- 5
14.3 Numeric Parameter Settings (NUMERIC Param.) 14- 6
14.3.1 <No.010 Frequency of the pseudo CI signal> 14- 6
14.3.2 <002: RTN transmission condition (1)><003: RTN transmission condition (2)><004: RTN transmission condition (3)> 14- 6
14.3.3 <005: NCC pause length (pre-ID code)> 14- 6
14.3.4 <006: NCC pause length (post-ID code)> 14- 6
14.3.5 <010: line connection identification length> 14- 6
14.3.6 <011: T.30 T1 timer (for reception)> 14- 7
14.3.7 <013: T.30 EOL timer> 14- 7
14.3.8 <016: time length to first response at time of fax/tel switchover> 14- 7
14.3.9 <017: pseudo RBT signal pattern ON time length><018: pseudo RBT signal pattern OFF time length (short)><019:

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

pseudo RBT signal pattern OFF time length (long)> 14- 7
14.3.10 <020: pseudo CI signal pattern ON time length><021: pseudo CI signal pattern OFF time length (short)><022: pseudo CI signal pattern OFF time length (long)> 14- 7
14.3.11 <023: CNG detention level for fax/tel switchover> 14- 7
14.3.12 <024: pseudo RBT transmission level at time of fax/tel switchover> 14- 7
14.3.13 <025: Answering machine connection function signal detection time> 14- 7
14.3.14 <027: V.21 low-speed flag preamble identification length> 14- 7
14.4 Scanner Function Settings (SCANNER) 14- 7
14.4.1 Numeric Parameter Functional configuration 14- 7
14.4.2 <024:CIS scan position during ADF scanning> 14- 8
14.4.3 <026:Distance from the standby position of CIS to the shading start point> 14- 8
14.4.4 <031Vertical scan start position adjustment> 14- 8
14.4.5 <032Horizontal scan start position adjustment> 14- 8
14.4.6 <033Vertical scan magnification correction> 14- 8
14.4.7 <034Horizontal scan magnification correction> 14- 8
14.4.8 <035: - 036:Reader motor speed change> 14- 8
14.4.9 <041: Vertical scan start position adjustment (when scanning on a document fed from ADF)> 14- 8
14.4.10 <042: Horizontal scan start position adjustment (when scanning on a document fed from ADF)> 14- 9
14.4.11 <043: Horizontal scan end position correction ((copy:scanning on ADF)> 14- 9
14.4.12 <044: Horizontal scan end position correction (superfine:scanning on ADF)> 14- 9
14.4.13 <045: Horizontal scan end position correction (fine:scanning on ADF)> 14- 9
14.4.14 <046: Horizontal scan end position correction (standard:scanning on ADF)> 14- 9
14.4.15 <047: Vertical scan magnification correction (when scanning on a document fed from ADF)> 14- 9
14.4.16 <048: Horizontal scan magnification correction (when scanning on a document fed from ADF)> 14- 9
14.4.17 <054: Pickup motor speed correction (when the ADF is used) > 14- 9
14.4.18 <193: ADF special standard-sized paper: LGL misidentification-ready> 14- 9
14.4.19 <194: ADF special standard-sized paper: LTR misidentification-ready> 14- 9
14.4.20 <195: ADF special standard-sized paper: LTR_R misidentification-ready> 14- 9
14.5 Printer Function Settings (PRINTER) 14- 10
14.5.1 Service Soft Switch Settings (SSSW) 14- 10
14.5.1.1 SSSW-SW05 .... 14- 10
14.5.1.2 SSSW-SW14 .... 14- 10
14.5.1.3 SSSW-SW15 .... 14- 11
14.5.2 Numeric Parameter Settings (NUMERIC Param.) 14- 11
14.5.2.1 Numeric Parameter Functional configuration 14- 11
14.5.2.2 <031: Top registration adjustment (manual feed tray)> 14- 11
14.5.2.3 <032: Top registration adjustment (cassette)> 14- 12
14.5.2.4 <033: Top registration adjustment (duplex unit)> 14- 12
14.5.2.5 <034: Left-end registration adjustment (manual feed tray)> 14- 12
14.5.2.6 <035: Left-end registration adjustment (cassette 1)> 14- 12
14.5.2.7 <036: Left-end registration adjustment (cassette 2)> 14- 12
14.5.2.8 <039: Left-end registration adjustment (duplex unit)> 14- 12
14.5.2.9 <040: Target fixing temperature adjustment (manual feed tray)> 14- 12
14.5.2.10 <041: Target fixing temperature adjustment (cassette 1)> 14- 12
14.5.2.11 <042: Target fixing temperature adjustment (cassette 2)> 14- 12
14.5.2.12 <053: Margin adjustment at the leading edge of the copy> 14- 12
14.5.2.13 <054: Margin adjustment at the trailing edge of the copy> 14- 12
14.5.2.14 <055: Margin adjustment at the right edge of the copy> 14- 12
14.5.2.15 <056: Margin adjustment at the left edge of the copy> 14- 12
14.6 Counter Indication (COUNTER) 14- 13
14.6.1 Counters 14- 13
14.6.2 Clearing Counters 14- 13
14.7 Report Output (REPORT) 14- 14
14.7.1 Report Output 14- 14
14.7.2 System Data List 14- 14
14.7.3 System Dump List 14- 14
14.7.4 Counter List 14- 16

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.7.5 Error Log List 14- 16
14.7.6 Spec List 14- 18
14.7.7 Service Label 14- 19
14.8 Download (DOWNLOAD) 14- 20
14.8.1 Download 14- 20
14.9 Data Initialization Mode (CLEAR) 14- 20
14.9.1 Clear 14- 20
14.10 ROM Management (ROM) 14- 20
14.10.1 ROM display 14- 20
14.11 Test Mode (TEST) 14- 21
14.11.1 Overview 14- 21
14.11.1.1 Outline 14- 21
14.11.1.2 Test Mode Menu List 14- 21
14.11.2 DRAM Test 14- 23
14.11.2.1 D-RAM Test<(1) D-RAM TEST> 14- 23
14.11.3 Scan Test 14- 24
14.11.3.1 Scan Test ((2) SCAN TEST) 14- 24
14.11.4 Print Test 14- 24
14.11.4.1 Print Test ((3) PRINT TEST) 14- 24
14.11.5 Modem Test 14- 24
14.11.5.1 MODEM Test ((4) MODEM TEST) 14- 24
14.11.6 Faculty Test 14- 26
14.11.6.1 FUNCTION TEST <(6) FUNCTION TEST> 14- 26
14.11.7 Cleaning Mode 14- 30
14.11.7.1 Roller cleaning mode ((0) ROLLER CLEAN) 14- 30

Chapter 15 Upgrading

15.1 Outline 15- 1
15.1.1 Overview of Upgrade 15- 1
15.2 Making Preparations 15- 1
15.2.1 Registering the System Software 15- 1
15.2.2 Connection 15- 3
15.3 Downloading System Software 15- 3
15.3.1 Downloading the System Software 15- 3
15.3.1.1 Downloading Procedure 15- 3
15.3.2 Downloading the Boot Software 15- 8
15.3.2.1 Downloading Procedure 15- 8
15.3.3 Otehr Upgrade Methods 15- 8
15.3.3.1 Downloading the PCL Software 15- 8

Chapter 16 Service Tools

16.1 Service Tools 16- 1
16.1.1 Special Tools 16- 1

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 1 Introduction

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

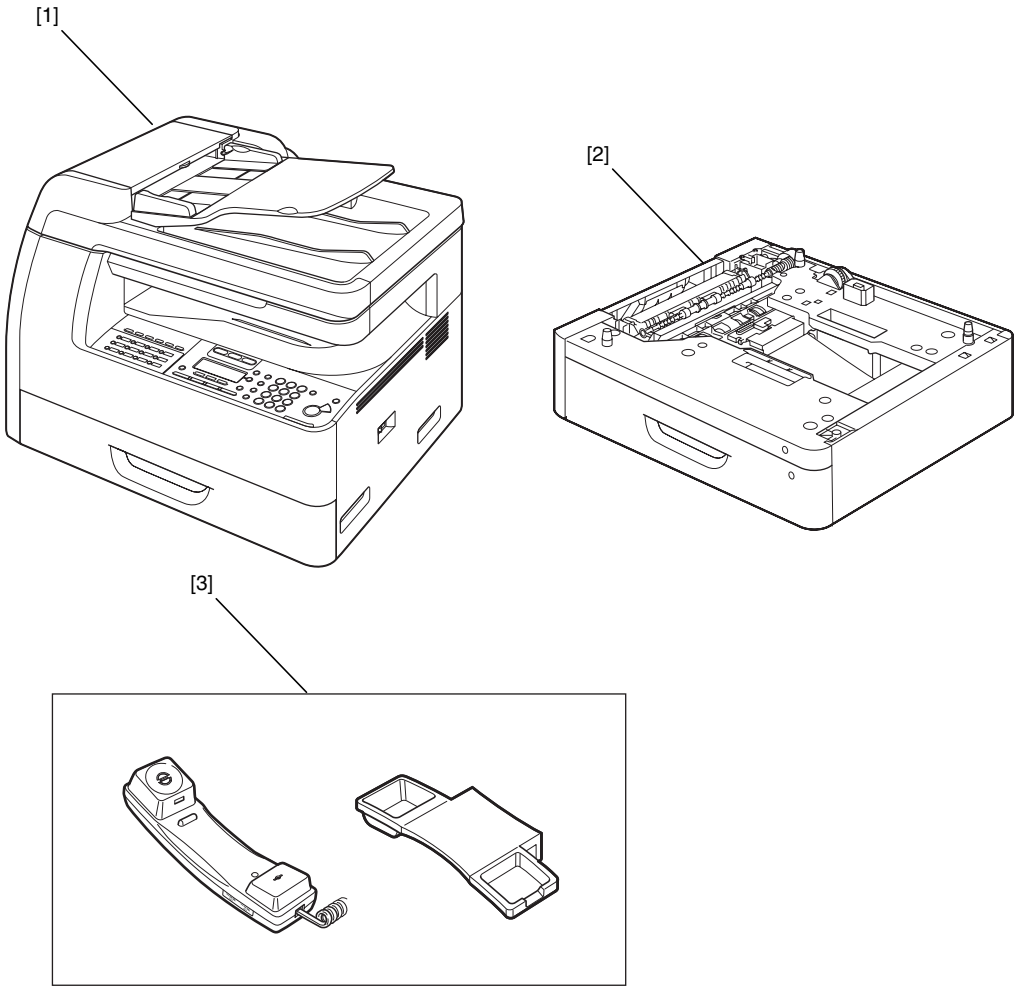
1.1 System Construction 1-1
1.1.1 System Construction 1-1
1.2 Product Specifications 1-2
1.2.1 Names of Parts 1-2
1.2.1.1 External View (Front) 1-2
1.2.1.2 External View (Rear) 1-2
1.2.1.3 Cross-Section (Main body) 1-3
1.2.1.4 Cross Section (ADF) 1-3
1.2.2 Using the Machine 1-5
1.2.2.1 Turning On the Power Switch 1-5
1.2.2.2 When Turning Off the Main Power Switch 1-6
1.2.2.3 Control Panel 1-8
1.2.3 User Mode Items 1-9
1.2.3.1 COMMON SETTINGS 1-9
1.2.3.2 COPY SETTINGS 1-9
1.2.3.3 FAX SETTINGS 1-10
1.2.3.4 ADDRESS BOOK SET. 1-10
1.2.3.5 PRINTER SETTINGS 1-10
1.2.3.6 TIMER SETTINGS 1-11
1.2.3.7 ADJUST./CLEANING 1-11
1.2.3.8 REPORT SETTINGS 1-11
1.2.3.9 SYSTEM SETTINGS 1-12
1.2.4 Maintenance by the User 1-13
1.2.4.1 User Maintenance Items 1-13
1.2.4.2 Cleaning 1-13
1.2.5 Safety 1-14
1.2.5.1 Safety of the Laser Light 1-14
1.2.5.2 Safety of Toner 1-14
1.2.5.3 CDRH Regulations 1-14
1.2.5.4 Handling the Laser Unit 1-15
1.2.5.5 Point to Note about Fire 1-15
1.2.5.6 Cautions as to the replacement and disposal of lithium battery 1-15
1.2.5.7 Storing and Handling the Cartridge Before Unpacking 1-16
1.2.5.8 Storing or Handling the Cartridge After Unpacking 1-16
1.2.6 Product Specifications 1-17
1.2.6.1 Product Specifications 1-17
1.2.6.2 ADF Specifications 1-18
1.2.7 Function List 1-18
1.2.7.1 Printing Speed 1-18
1.2.7.2 Types of Paper 1-19

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.1 System Construction

1.1.1 System Construction

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



F-1-1

[1] Host machine
[2] Cassette Unit-M1
[3] Hand Set CT-25 *1
*1 The handset comes standard with the imageCLASS MF6550 for China. It is optionally available for the Laser Base MF6550 for Europe and Laser Base MF6580PL. It is not available optionally for other models.

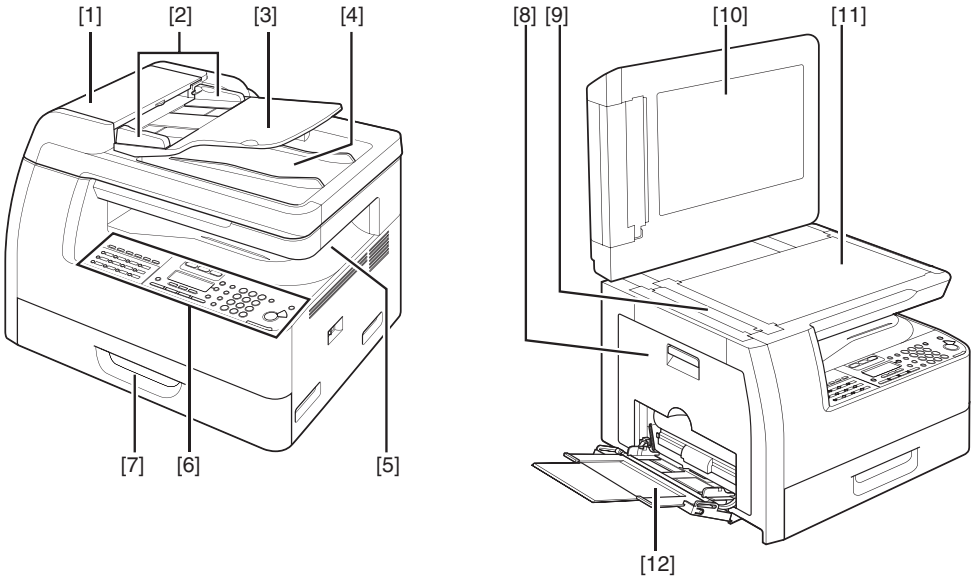
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.2 Product Specifications

1.2.1 Names of Parts

1.2.1.1 External View (Front)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

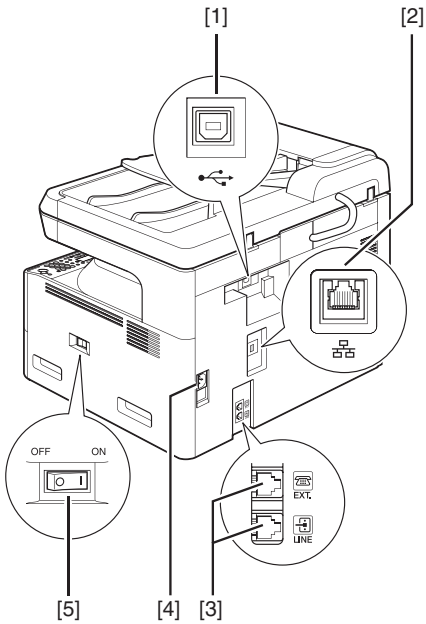


F-1-2
T-1-1

[1]	Open/close cover	[7]	Cassette
[2]	Slide guide	[8]	Left cover
[3]	Document feeder tray	[9]	Scanning glass
[4]	Document delivery tray	[10]	White plate
[5]	Delivery tray	[11]	Orginal glass
[6]	Operation panel	[12]	Multi-purpose tray

1.2.1.2 External View (Rear)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



F-1-3
T-1-2

[1]	USB port
[2]	Ethernet port*1
[3]	Modular jack*2

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

[4] Power socket

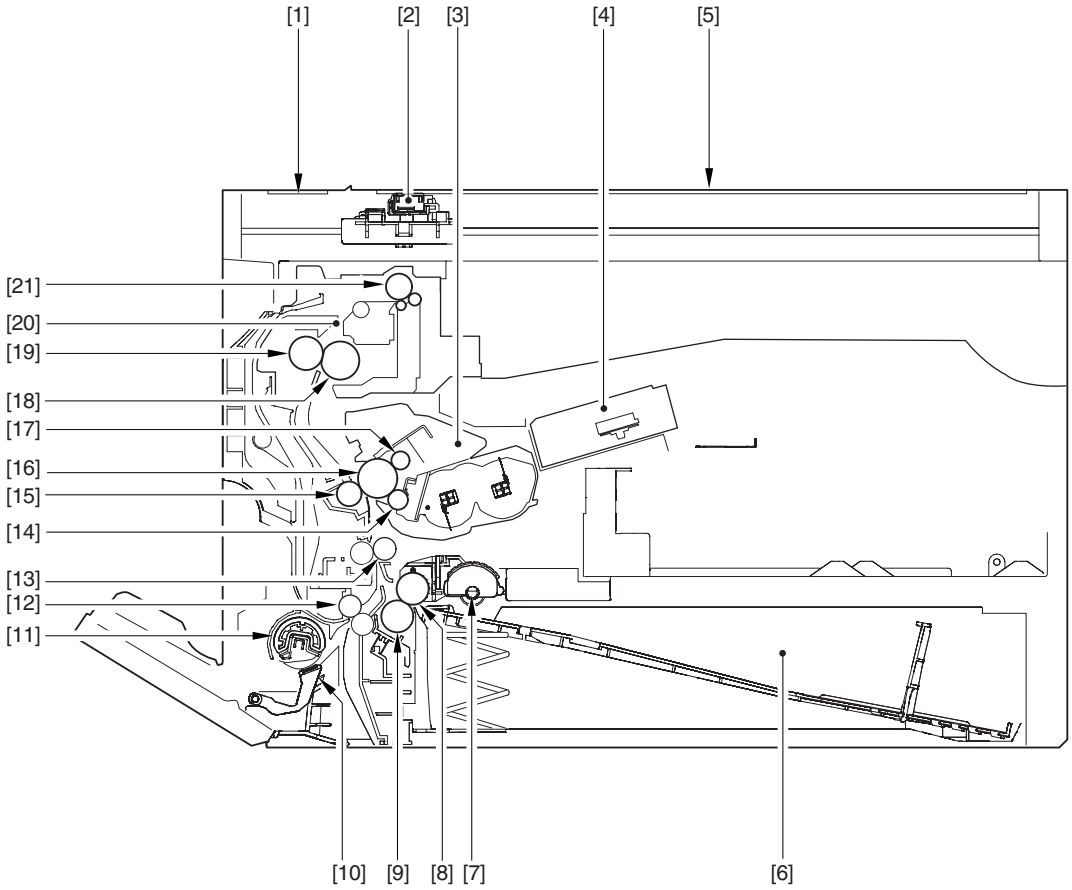
[5] Main power switch

*1: If equipped with printer functions.

*2: If equipped with fax functions.

1.2.1.3 Cross-Section (Main body)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



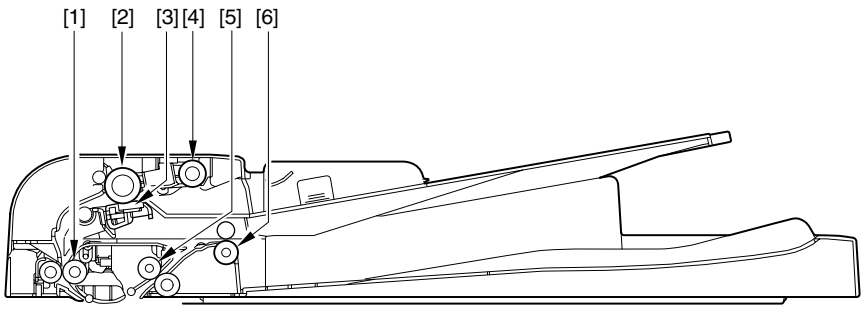
F-1-4

T-1-3

[1]	CS unit	[12]	Vertical path roller
[2]	Reading glass	[13]	Registration roller
[3]	Toner cartridge	[14]	Developing cylinder
[4]	Laser scanner unit	[15]	Transfer charging roller
[5]	Copyboard glass	[16]	Photopositive drum
[6]	Cassette	[17]	Primary charging roller
[7]	Pickup roller	[18]	Fixing film unit
[8]	Feed roller	[19]	Fixing pressure roller
[9]	Separation roller	[20]	Fixing unit
[10]	Manual feed separation pad	[21]	Delivery roller
[11]	Manual feed pickup roller		

1.2.1.4 Cross Section (ADF)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



F-1-5

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

T-1-4

[1]	Registration roller
[2]	Feed roller
[3]	Separation pad
[4]	Pickup roller
[5]	Feed roller 1
[6]	Delivery roller

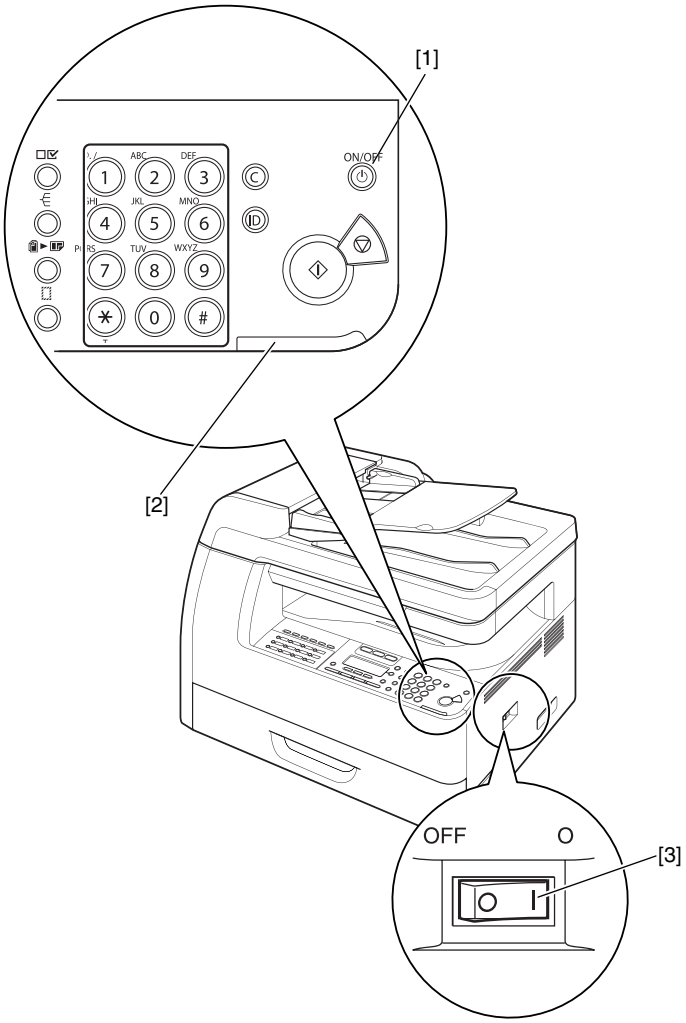
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.2.2 Using the Machine

1.2.2.1 Turning On the Power Switch

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine possesses 2 power switches: main power switch and control power switch. Normally (i.e., unless the machine is in a sleep state), the machine will be supplied with power when you turn on its main power switch.



F-1-6

[1] Control panel power switch
[2] Main power lamp
[3] Main power switch

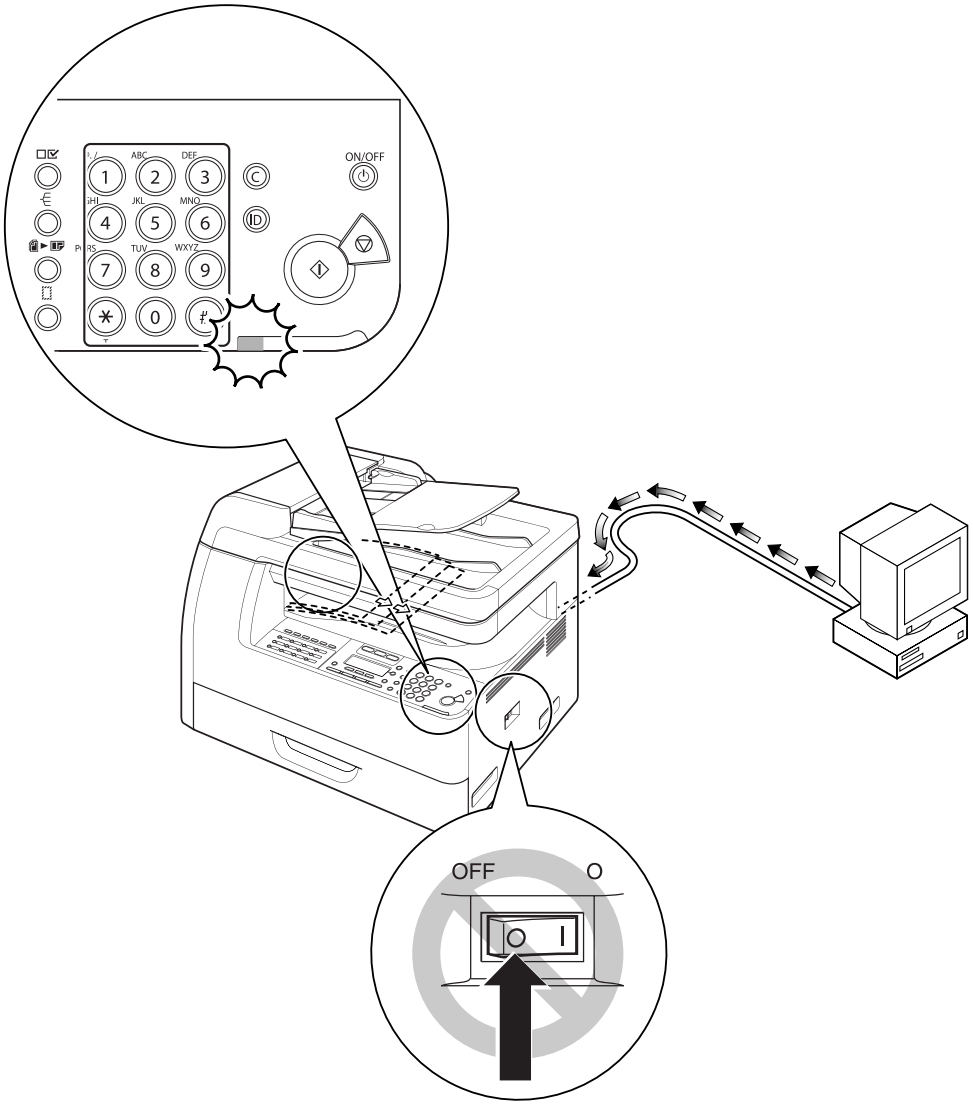
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.2.2.2 When Turning Off the Main Power Switch

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

<During printing or fax data transmission/reception>

Be sure to operate the main power switch while the Processing/Data lamp on the control panel is not lit.
(Turning off the main switch during printing or fax data transmission/reception can erase the data being processed.)

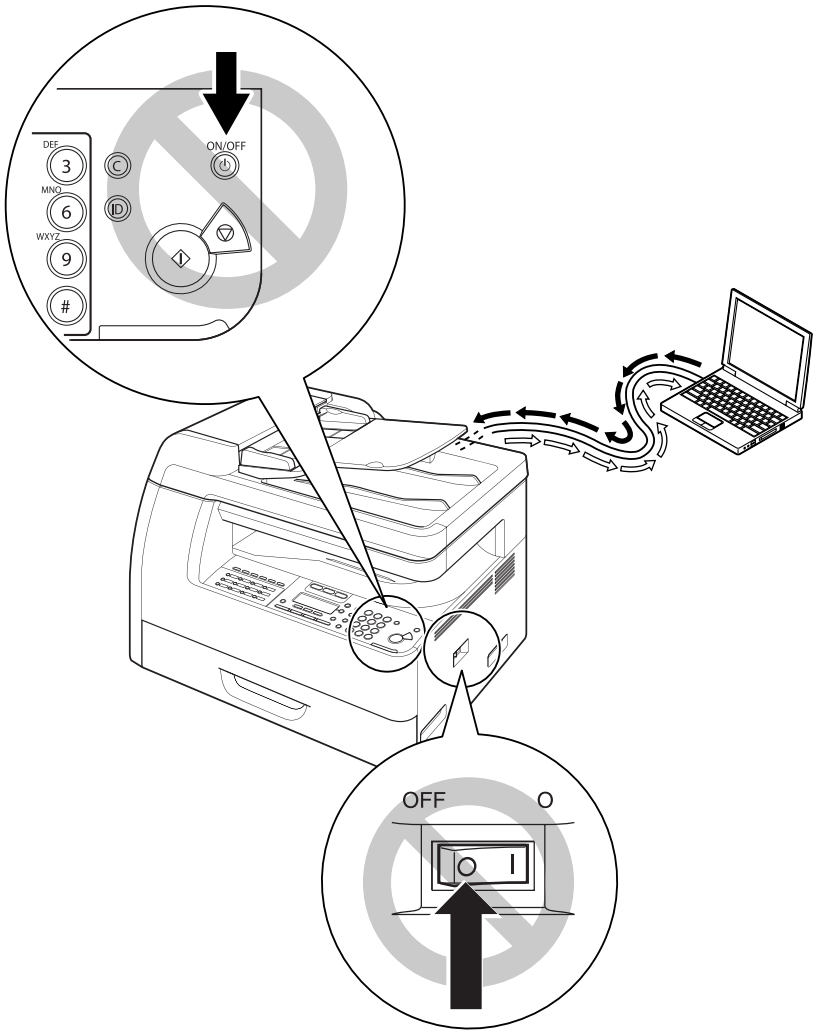


F-1-7

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

<During downloading>

Do not turn off the power switch or ON/OFF switch on the control panel.
(Turning off the main power switch during downloading can make this machine inoperative.)

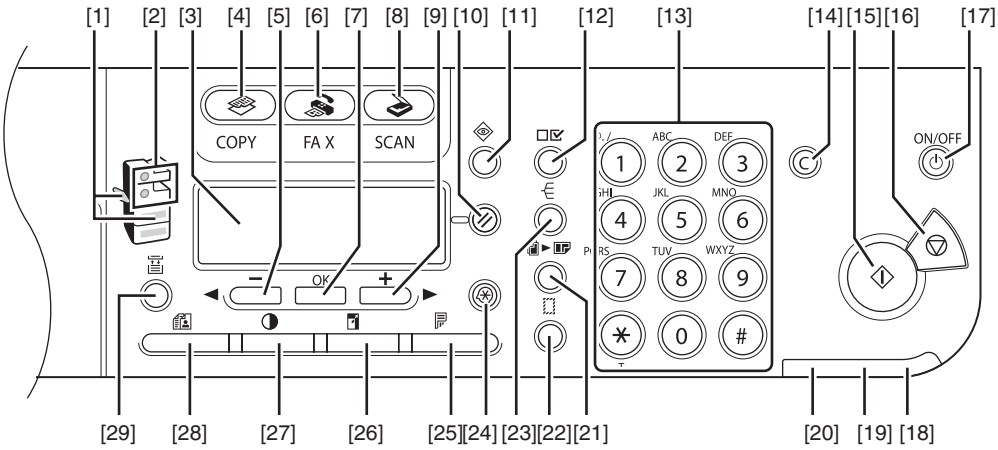


F-1-8

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.2.2.3 Control Panel

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

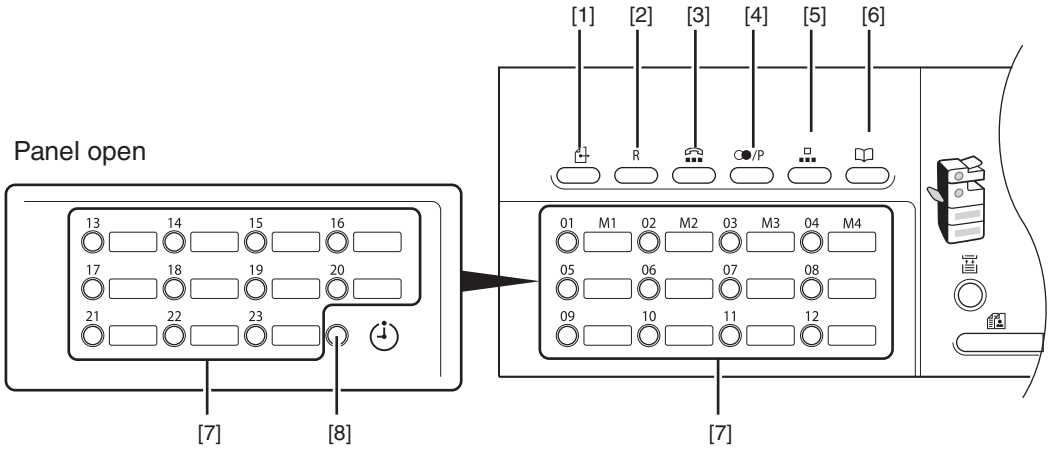


F-1-9

[1] Paper Select indicator
[2] Jam Location indicator
[3] LCD display
[4] [COPY] button
[5] [</-] button
[6] [FAX] button *1
[7] [OK] button
[8] [SCAN] button
[9] [>/+] button
[10] [Reset] button
[11] [System Monitor] button
[12] [View Settings] button
[13] Numeric buttons
[14] [Clear] button
[15] [Stop] button
[16] [Start] button
[17] [ON/OFF] button (operation panel power switch)
[18] [Power] indicator
[19] [Error] indicator
[20] [Processing/Data] indicator
[21] [2 on 1] button
[22] [Frame Erase] button
[23] [Collate] button
[24] [Additional Functions] button
[25] [Two-Sided] button
[26] [Enlarge/Reduce] button
[27] [Density] button
[28] [Image Quality] button
[29] [Paper Select] button

*1: If equipped with fax functions.

<FAX model>



F-1-10

[1] [Direct TX] button
[2] [Pause] button
[3] [Hook] button
[4] [Redial] button
[5] [Coded Dial] button
[6] [Address Book] button
[7] One-Touch Speed Dial buttons
[8] [Delayed TX] button

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.2.3 User Mode Items

1.2.3.1 COMMON SETTINGS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

MEMO:
User modes of the USA model (Copy + Print + Scan + Fax + ADF + Network + PCL) are described. Menus and defaults may vary depending on the destination. For details, refer to the User's Guide.

Additional Functions	Available Settings
1. DEFAULT SETTINGS	COPY, FAX(*), SCAN
2. AUTO CLEAR SET.	INITIAL FUNCTION(*), SELECTED FUNCTION
3. AUDIBLE TONES	ENTRY TONE: ON (volume 1(*) to 3), OFF
	ERROR TONE: ON (volume 1(*) to 3), OFF
	TX JOB DONE TONE: ERROR ONLY (volume 1(*) to 3), OFF, ON (volume 1(*) to 3)
	RX JOB DONE TONE: ERROR ONLY (volume 1(*) to 3), OFF, ON (volume 1(*) to 3)
	SCAN DONE TONE: ERROR ONLY (volume 1(*) to 3), OFF, ON (volume 1(*) to 3)
	PRINT DONE TONE: ERROR ONLY (volume 1(*) to 3), OFF, ON (volume 1(*) to 3)
4. TONER SAVER MODE	OFF(*), ON
5. PRINTER DENSITY	1 to 9 (5(*))
6. AUTO DRAWER SELCT	COPY: CASSETTE 1 (ON(*), OFF), CASSETTE 2 (ON(*), OFF), MP TRAY (OFF(*), ON)
	PRINTER: CASSETTE 1 (ON(*), OFF), CASSETTE 2 (ON(*), OFF)
	FAX: CASSETTE 1 (ON(*), OFF), CASSETTE 2 (ON(*), OFF), MP TRAY (OFF(*), ON)
	OTHER: CASSETTE 1 (ON(*), OFF), CASSETTE 2 (ON(*), OFF), MP TRAY (OFF(*), ON)
7. SELECT PAPER TYPE	CASSETTE 1, CASSETTE 2
8. REG. PAPER TYPE	CASSETTE 1: PLAIN PAPER(*), COLOR, RECYCLED, HEAVY PAPER 1, BOND, HOLE PUNCH PAPER
	CASSETTE 2: PLAIN PAPER(*), COLOR, RECYCLED, HEAVY PAPER 1, BOND, HOLE PUNCH PAPER
9. ENERGY IN SLEEP	LOW(*), HIGH
10. MP TRAY STD SET	OFF(*), ON: PAPER SIZE (LTR, SMTR, EXECUTIV, OFICIO, BRAZIL-OFICIO, MEXICO-OFICIO, FOLIO, G-LTR, FLSP, COM10, MONARCH, DL, ISO-C5, ISO-B5, FREESIZE, A4, B5, A5R, LGL), SELECT PAPER TYPE (PLAIN PAPER, COLOR, RECYCLED, HEAVY PAPER 1, HEAVY PAPER 2, HEAVY PAPER 3, BOND, HOLE PUNCH PAPER, TRANSPARENCY, LABELS, ENVELOPE)
11. PAPER FEED SWITCH	MP TRAY (SPEED PRIORITY(*), PRINT SIDE), CASSETTE 1 (SPEED PRIORITY(*), PRINT SIDE), CASSETTE 2 (SPEED PRIORITY(*), PRINT SIDE)
12. DISPLAY LANGUAGE	ENGLISH(*), FRENCH, SPANISH, PORTUGUESE
13. ADF DIRTY ERROR	DISPLAY(*), DO NOT DISPLAY
14. INIT. COMMON SET.	OFF(*), ON

*: indicates factory settings.

1.2.3.2 COPY SETTINGS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Additional Functions	Available Settings
1. IMAGE DIR PRIORTY	OFF(*), ON
2. STANDARD SETTINGS	IMAGE QUALITY: TEXT/PHOTO(*), TEXT, PHOTO
	DENSITY: AUTO(*), MANUAL (-LT - DK+: 9 steps, 5)
	ZOOM RATIO: PRESET RATIO (DIRECT 100%(*), 115% B5->A4, 121% LGL->11x17, 122% A5->B5,129% STMT->LTR,141% A5->A4, 200% MAX., 50% MIN., 64%, 70% A4->A5, 73% 11X17->LGL, 78% LGL->LTR, 81% B5->A5, 86% A4->B5), MANUAL
	COPIES: 1(*) to 99
	AUTO COLLATE: OFF(*), COLLATE
	TWO-SIDED: OFF(*), 1 > 2-SIDED, 2 > 2-SIDED, 2 > 1-SIDED
	FRAME ERASE: OFF(*), ORG. FRAME ERASE, BOOK FRAME ERASE, BINDING HOLE
	PAPER SELECT: AUTO(*), CASSETTE 1, CASSETTE 2
3. SHARPNESS	1 to 9 (5(*))
4. PAPER SIZE GROUP	A, AB, INCHES(*)
5. MM/INCH ENTRY	mm, INCHES(*)

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Additional Functions	Available Settings
6. INIT. COPY SET.	OFF(*), ON

*: indicates factory settings.

1.2.3.3 FAX SETTINGS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Additional Functions	Available Settings
1.RX MODE	FAXONLY, FAXTEL, ANSMODE, DRPD, MANUAL
2. USER SETTINGS	UNIT TELEPHONE #
	UNIT NAME
	TX TERMINAL ID: PRINTING POSITION: OUTSIDE IMAGE(*), INSIDE IMAGE, TELEPHONE # MARK: FAX(*), TEL
	SCANNING DENSITY: -LT - DK+ 9 steps (5(*))
	TEL LINE TYPE: TOUCH TONE(*), ROTARY PULSE
	VOLUME CONTROL: MONITOR VOL. CTRL (0 - 3 (1(*))), CALLING VOLUME (0 - 3 (1(*)))
	OFFHOOK ALARM: ON, OFF(*)
	STANDARD SETTINGS: DENSITY (STANDARD(*), DK, LT), IMAGE QUALITY (STANDARD(*), FINE, PHOTO, SUPER FINE, ULTRA FINE), DIRECT TX (OFF(*), ON)
	INIT. FAX STD SET: OFF(*), ON
3. TX SETTINGS	ECM TX: ON(*), OFF
	PAUSE TIME: 1 to 15 (4(*)) SEC.
	AUTO REDIAL: ON (REDIAL TIMES, REDIAL INTERVAL, TX ERROR REDIAL)(*), OFF
	TIME OUT: ON(*), OFF
	DIALING LINE CHCK: ON(*), OFF
4. RX SETTINGS	ECM RX: ON(*), OFF
	FAX/TEL OPT. SET: RING START TIME (0-30 (6*)), F/T RING TIME: (15-300 (15*)), F/T SWITCH ACTION: RECEIVE(*), DISCONNECT
	DRPD:SELECT FAX: DOUBLE RING(*), SHORT-SHORT-LONG, OTHER RING TYPR, NORMAL RING
	INCOMING RING: OFF(*), ON (RING COUNT (1-99TIMES)
	REMOTE RX: ON (REMOTE RX ID (0-9,#)), OFF(*)
	MANUAL/AUTO: OFF(*), ON (F/T RING TIME (1-99SEC)
5. PRINTER SETTINGS	SELECT CASSETTE: SWITCH A (ON(*), OFF), SWITCH B (ON(*), OFF), SWITCH C (ON(*), OFF), SWITCH D (ON(*), OFF)
	RECEIVE REDUCTION: ON (RECEIVE REDUCTION, REDUCE DIRECTION)(*), OFF
	TWO-SIDED PRINT: OFF(*), ON
	CONT. PRINTING: RX TO MEMORY(*), KEEP PRINTING

*: indicates factory settings.

1.2.3.4 ADDRESS BOOK SET.

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Additional Functions	Available Settings
1. 1-TOUCH SPD DIAL	Up to 23 destinations can be registered: TEL NUMBER ENTRY, NAME, OPTIONAL SETTING
2. CODED SPD DIAL	Up to 100 destinations can be registered: TEL NUMBER ENTRY, NAME, OPTIONAL SETTING
3. GROUP DIAL	Up to 122 destinations can be registered: TEL NUMBER ENTRY, NAME

*: indicates factory settings.

1.2.3.5 PRINTER SETTINGS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Additional Functions	Available Settings
1. DEFAULT PAPERSIZE	LTR(*), STMT, EXECUTIV, ISO-B5, COM10, MONARCH, DL, A4, B5, A5, LGL
2. DEFAULT PAPERTYPE	PLAIN PAPER(*), COLOR, RECYCLED, HEAVY PAPER 1, HEAVY PAPER 2, HEAVY PAPER 3, 3 HOLE PUNCH PAPER, BOND, TRANSPARENCY, LABELS, ENVELOPE
3. COPIES	1(*) to 999
4. 2-SIDED PRINTING	OFF(*), ON
5. PRINT QUALITY	IMAGE REFINEMENT: ON(*), OFF
	DENSITY: 1 to 9 (5(*))
	TONER SAVER: OFF(*), ON

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Additional Functions	Available Settings
6. PAGE LAYOUT	BINDING: LONG EDGE(*), SHORT EDGE
	MARGIN: mm (-50.0 mm to +50.0 mm; 0.0 mm(*)), INCHES (-01.90 INCHES to 01.90 INCHES; 00.00 INCHES(*))
7. ERROR TIME OUT	ON (5(*) to 300 SEC), OFF
8. COLLATE	OFF(*), COLLATE
9. INIT. PRINTER SET	OFF(*), ON
10. PCL SETTINGS**	ORIENTATION: PORTRAIT(*), LANDSCAPE
	FONT NUMBER: 0(*) to 120
	POINT SIZE: 4.00 to 999.75 point (12.00 point(*))
	PITCH: 0.44 to 99.99 cpi (10.00 cpi(*))
	FORM LINES: 5 to 128 lines (64 lines(*))
	SYMBOL SET: PC8(*), PC850, PC852, PC8DN, PC8TK, PC1004, PIFONT, PSMATH, PSTEXT, ROMAN8, VNINTL, VNMATH, VNUS, WIN30, WINBALT, WINL1, WINL2, WINL5, DESKTOP, ISO4, ISO6, ISO11, ISO15, ISO17, ISO21, ISO60, ISO69, ISOL1, ISOL2, ISOL5, ISOL6, LEGAL, MATH8, MCTEXT, MSPUBL, PC775
	CUSTOM PAPER: OFF(*), ON (UNIT OF MEASURE, X DIMENSION, Y DIMENSION)
	APPEND CR TO LF: NO(*), YES
	ENLARGE A4: OFF(*), ON
11. RESET PRINTER	OFF(*), ON

*: indicates factory settings.

1.2.3.6 TIMER SETTINGS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Additional Functions	Available Settings
1. DATE&TIME SETTING	Default setting
2. DATE TYPE SELECT	DD/MM YYYY, YYYY MM/DD, MM/DD/ YYYY(*)
3. AUTO SLEEP TIME	ON (3 - 30 (3(*)) MIN. in one-minute increments), OFF
4. AUTO CLEAR TIME	ON (1 - 9 (2(*)) MIN. in one-minute increments), OFF
5. DAYLIGHT SV. TIME	ON: START DATE/TIME (MONTH, WEEK, DAY), END DATE/TIME (MONTH, WEEK, DAY), OFF(*)

*: indicates factory settings.

1.2.3.7 ADJUST./CLEANING

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Additional Functions	Available Settings
1. TRANS. ROLR CLEAN	Press [OK] to start cleaning.
2. FIX. UNIT CLEANING	START CLEANING, CLEAN PAPER PRT
3. FEEDER CLEANING	Set 5 sheets in the optional feeder and press [OK].
4. SPECIAL MODE M	MID(*), LOW, HIGH
5. SPECIAL MODE N	Not functional in this model
6. SPECIAL MODE O	Not functional in this model
7. SPECIAL MODE P	OFF(*), ON
8. FIX. UNIT OFFSET	OFF(*), SPEED PRIORITY
9. CONT PRINT MODE	OFF(*), ON
10. BACK EDGE MODE	OFF(*), ON
11.LARGE PAPER MODE	OFF(*), ON
12. AUTO ADF DRTY ADJ	OFF(*), ON
13. MAINTENANCE CODE	Not functional in this model

*: indicates factory settings.

1.2.3.8 REPORT SETTINGS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Additional Functions	Available Settings
1. SETTINGS	TX REPORT: PRINT ERROR ONLY(*), OUTPUT YES, OUTPUT NO
	RX REPORT: OUTPUT NO(*), PRINT ERROR ONLY, OUTPUT YES
	ACTIVITY REPORT: AUTO PRINT, OFF(ON(*)), TX/RX SEPARATE (OFF(*), ON)
2. LIST PRINT	ACTIVITY REPORT
	SPEED DIAL LIST: 1-TOUCH LIST, CODED DIAL LIST, GROUP DIAL LIST
	ADD BOOK DETAILS: 1-TOUCH LIST, CODED DIAL LIST
	USER DATA LIST

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

*: indicates factory settings.

1.2.3.9 SYSTEM SETTINGS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Additional Functions	Available Settings
1. DEVICE INFO	DEVICE NAME, LOCATION
2. NETWORK SETTINGS	TCP/IP SETTINGS: IP ADDRESS AUTO. (OFF(*), ON(*); DHCP, BOOTP, RARP), IP ADDRESS, SUBNET MASK, GATEWAY ADDRESS, USE LPD (ON(*); PORT NO., OFF), RAW SETTINGS (ON(*); PORT NO., USE BIDIRECTIONAL, OFF), USE HTTP (ON(*); PORT NO., OFF), SET IP ADD RANGE (OFF(*), ON), RX MAC ADD SET. (OFF(*), ON)
	SNMP SETTINGS: USE SNMP (ON(*): PORT NO., OFF), COMMUNITY NAME 1, COMMUNITY NAME 2, SNMP WRITABLE 1 (ON(*), OFF), SNMP WRITABLE 2 (ON, OFF(*))
	DEDICATED PORT: ON(*), OFF
	ETHERNET DRIVER: AUTO DETECT (AUTO(*), MANUAL), DUPLEX (HALF DUPLEX(*), FULL DUPLEX), ETHERNET TYPE (10 BASE-T(*), 100 BASE-TX)
	VIEW IP ADDRESS: IP ADDRESS, SUBNET MASK, GATEWAY ADDRESS
	STARTUP TIME SET.: 0(*) to 300 SEC.
3. COMMUNICATIONS	TX START SPEED: 2400 to 33600(*) bps
	RX START SPEED: 2400 to 33600(*) bps
	MEMORY LOCK SETTI: OFF(*), ON (PASSWORD, REPORT PRINT, MEMORY RX TIME)
4. REMOTE UI	ON(*), OFF
5. ACCESS TO DEST.	RESTRICT NEW ADD. : OFF(*), ON
	FAX DRIVER TX: OFF, ON(*)
6. CHECKING THE LOG	ON, OFF(*)
7. USE DEVICE USB	OFF, ON(*)

*: indicates factory settings.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.2.4 Maintenance by the User

1.2.4.1 User Maintenance Items

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-1-5

No.	Item	Maintenance cycle
[1]	Pressure plate cleaning	As required
[2]	Copyboard glass(large/small) cleaning, Copyboard holder (jump board)	As required
[3]	Fixing pressure roller cleaning	As required
[4]	Transfer roller cleaning	As required
[5]	ADF roller cleaning	As required
[6]	Exterior cleaning	As required
[7]	Toner cartridge replacement	When the message appears

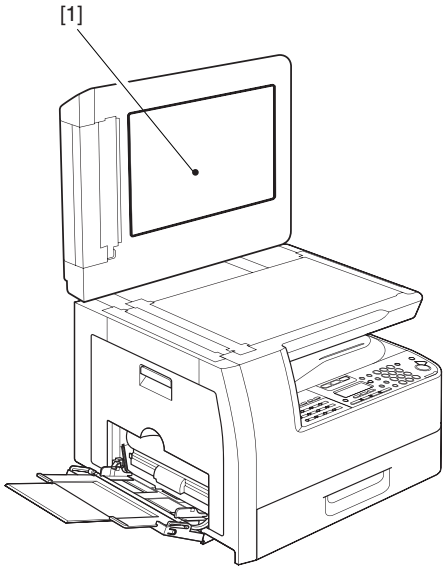
1.2.4.2 Cleaning

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The parts that should be cleaned by the customer to maintain the design performance and the cleaning method are described below.
The service engineer should instruct the customer to clean the machine at regular intervals (once a month).

1. Pressure Plate

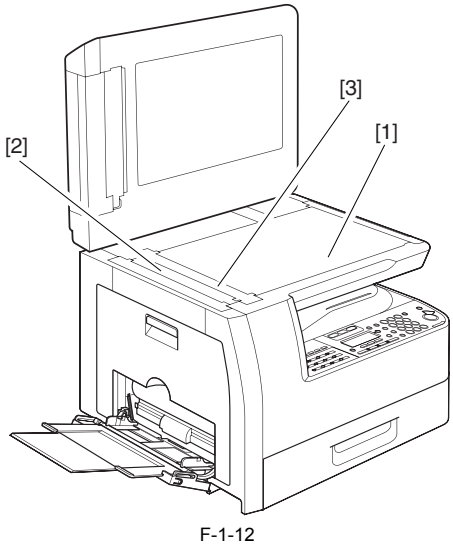
Clean the pressure plates [1] with a cloth dampened with water or neutral detergent and squeezed hard, and then wipe it with a dry soft cloth.



F-1-11

2. Copyboarg Glass (large/small)/Copyboard holder (jump board)

Clean the copyboard glass (large) [1], copyboard glass (small) [2] and copyboard holder (jump board) [3] with a cloth dampened with water or neutral detergent and squeezed hard, and then wipe them with a dry soft cloth.



F-1-12

3. Cleaning the Fixing Pressure Roller

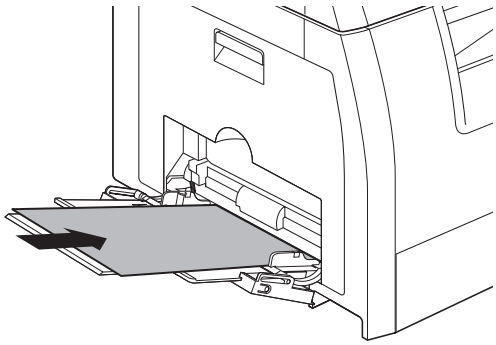
If black streaks are seen on the printed paper, the fixing pressure roller can be dirty. If black streaks are seen on the printed paper, clean the fixing pressure roller in the user mode. Be sure to clean the fixing pressure roller after replacing the toner bottle.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

When cleaning the fixing pressure roller, manually feed A4 paper.

MEMO:
The time required for cleaning is about 100 seconds.

1) Press the user mode key "" to enter the user mode.
2) Using the left an right arrow keys, display the "ADJUST./CLEANING" menu.
3) Press the OK key.
4) Using the left and right arrow keys, select "FIX. UNIT CLEANING".
5) Open the manual feed tray.
6) Place an A4 or LTR sheet of plain paper in the manual feed tray.



F-1-13

7) Select the paper size, press the OK key.
8) Select the paper type, press the OK key. The machine will start cleaning the fixing pressure roller.

4.Cleaning the Transfer Roller

If the reverse side of the printed paper is stained, the transfer roller can be dirty. If the reverse side of the printed paper is stained, clean the transfer roller in the user mode.

1) Press the user mode key "" to enter the user mode.
2) Using the left and right arrow keys, display the "ADJUST./CLEANING".
3) Press the OK key.
4) Using the left and right arrow keys, select "TRANS. ROLR CLEAN". Next, press the OK key. Cleaning will start.

5. Cleaning the ADF roller

If black streaks are seen on the printed paper from the ADF, the internal roller in the ADF can be dirty. If this symptom occurs, clean the internal roller in the user mode.

) Press the user mode key "" to enter the user mode.
2) Using the left and right arrow keys, display the "ADJUST./CLEANING" menu.
3) Press the OK key.
4) Using the left and right arrow keys, select "FEEDER CLEANING".
5) Load five sheets of paper in the ADF and pres the OK key. Cleaning will start.

1.2.5 Safety

1.2.5.1 Safety of the Laser Light

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Laser light can prove to be hazardous to the human body. The machine's laser unit is fully enclosed in a protective housing and external covers so that its light will not escape outside as long as the machine is used normally.

1.2.5.2 Safety of Toner

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine's toner is a non-toxic material made of plastic, iron, and small amounts of dye.

Do not throw toner into fire. It may cause explosion.

Toner on Clothing or Skin
1. If your clothing or skin has come into contact with toner, wipe it off with tissue; then, wash it off with water.
2. Do not use warm water, which will cause the toner to jell and fuse permanently with the fibers of the cloth.
3. Do not bring toner into contact with plastic material. It tends to react easily.

1.2.5.3 CDRH Regulations

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The Center for Devices and Radiological Health of the US Food and Drum Administration put into force regulations concerning laser products on August 2, 1976. These regulations apply to laser products manufactured on and after August 1, 1976, and the sale of laser products not certified under the regulations is banned within the Untied States. The label shown here indicates compliance with the CDRH regulations, and its attachment is required on all laser products that are sold in the United States.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

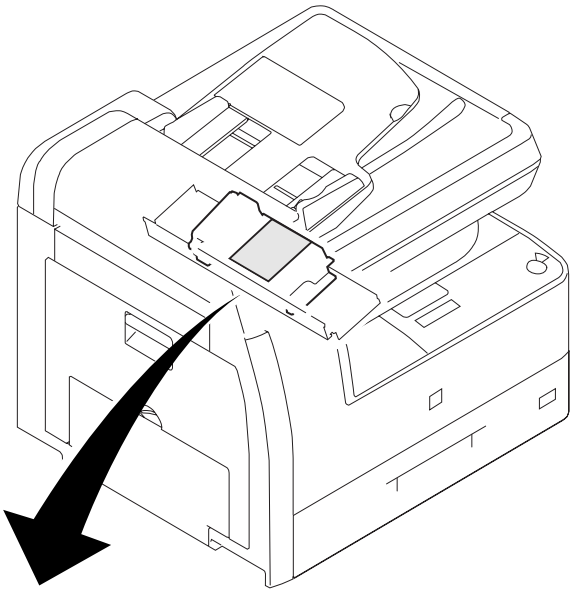
CANON
30-2, SHIMOMARUKO, 3-CHOME, OHTAKU, TOKYO,
146, JAPAN.
MANUFACTURED:
THIS PRODUCT CONFORMS WITH DHHS RADIATION
PERFORMANCE STANDARD 21CFR CHAPTER 1
SUBCHAPTER J.

F-1-14

1.2.5.4 Handling the Laser Unit

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The laser scanner unit emits invisible laser light inside it. If exposed to laser light, the human eye can irreparably be damaged. Never attempt to disassemble the laser scanner unit. (It is not designed for servicing in the field.)
Warning labels are affixed to the top cover of the laser scanner unit.



DANGER - Invisible laser radiation when open. AVOID DIRECT EXPOSURE TO BEAM.
CAUTION - CLASS 3B INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO THE BEAM.
ATTENTION - RAYONNEMENT LASER INVISIBLE DE CLASSE 3B EN CAS D' OUVERTURE, ÉVITEZ L' EXPOSITION AU FAISCEAU.
VORSICHT - UNSICHTBARE LASERSTRAHLUNG KLASSE 3B, WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
PRECAUCIÓN - RADIACIÓN LÁSER INVISIBLE DE CLASE 3B PRESENTE AL ABRIR. EVITE LA EXPOSICIÓN AL HAZ.
VARNING - KLASS 3B OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STRÅLEN ÄR FARLIG.
VAROITUS - LUOKAN 3B NÄKYMÄTTÖMÄLLE LASER-SÄTEILYÄ AVATTUNA. VÄLTÄ ALTISTUMISTA SÄTEELLE.
注 意 - 打开时，存在不可见的3B类激光辐射，请避免接触该激光束
注 意 - 打開機器蓋板時有3B級不可視雷射光釋出，應避免曝射
주 의 - 열리면 등급 3B 비가시 레이저 방사선이 방출됩니다. 광선에 노출을 피하십시오.
注 意 - ここを開くとクラス3B不可視レーザ放射が出ます。ビームに身をさらさないこと。
FS7-8335

F-1-15

1.2.5.5 Point to Note about Fire

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

It is dangerous to throw lithium batteries and parts and components containing flammable substances, such as cartridges, etc., into fire. Such parts and components must be disposed of in accordance with local laws and regulations.

1.2.5.6 Cautions as to the replacement and disposal of lithium battery

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine's image processor is equipped with a fixed lithium battery.
Risk of explosion if Battery is replaced by an incorrect type.
Dispose of used Batteries according to the instructions.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.2.5.7 Storing and Handling the Cartridge Before Unpacking

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Whether it is left packed or unpacked, or is fitted to the machine, the cartridge is subject to the effects of the environment, and will deteriorate over time. The speed of deterioration depends on the site or storage condition, and cannot be generalized. Take full care when storing or handing it.

If the cartridge is to be stored in a storeroom or a workshop, be sure to refer to table, and keep the following in mind:
- Avoid direct sunshine.
- Avoid vibration.
- Avoid impact. (Take care not to drop it.)

T-1-6

Temperature		
Normal (9/10 of total storage period)		0 to 35 deg C
Severe (1/10 of total storage time)	High	35 to 40 deg C
	Low	-20 to 0 deg C
Change in temperature (within about 3 min)		40 to 15 deg C -20 to 25 deg C
Humidity		
Normal (9/10 of total storage period)		35 to 85 %RH
Severe (1/10 of total storage time)	High	85 to 95 %RH
	Low	10 to 35 %RH
Atmospheric pressure		0.6 to 1.01hpa
Effective period		2.5 yr (approx.)

1.2.5.8 Storing or Handling the Cartridge After Unpacking

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The photosensitive medium is made of organic photo-conducting material (OPC), and will deteriorate if exposed to strong light. It is also used to hold toner inside it. Be sure to advise the user to be fully careful when storing and handling the cartridge. (The cartridge must always be put inside a protective bag for storage.)
a. Use a protective bag for storage.
b. Avoid areas subject to direct sunshine (e.g., near a window). Do not leave it alone inside a card, as the temperature can rise to an extremely high level. (These are also true even if the cartridge is put in a protective bag.)
c. Avoid areas subject to high temperature/humidity or low temperature/humidity, areas subject to rapid changes in temperature or humidity, or areas subject to condensation (e.g., near an air conditioner).
d. Avoid areas exposed to corrosive gas (e.g., insecticide) or salty air.
e. Avoid areas subject to dust, ammonium gas, or organic solvent gas.
f. Avoid areas near a CRT display, disk drive, and floppy disk. (The magnetism from the cartridge can destroy the data.)
g. Keep it out of reach of children.
h. Keep the temperature between 0 and 35 deg C.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1.2.6 Product Specifications

1.2.6.1 Product Specifications

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Copyboard	stream reading, fixed reading
Body	desktop
Light source type	LED
Lens type	CS (Contact sensor)
Photosensitive medium	OPC drum (24-mm dia.)
Reproduction method	indirect electrostatic
Exposure method	by laser light
Charging method	by roller contact
Development method	1-component toner projection
Transfer method	by transfer roller
Separation method	by curvature + static eliminator
Pickup method	Cassette: 1 cassette Multifeeder: 1 feeder
Cassette pickup method	claw + retard
Multifeeder pickup method	dual processing
Drum cleaning method	by cleaning blade
Fixing method	SURF (on-demand)
Toner supply type	by toner cartridge
Toner type	magnetic negative toner
Auto Clear	yes
Original type	Sheet, book, 3-D object (2 kg max.)
Maximum original size	LGL (356 X 216mm)
Reproduction ratio	A series: 2R2E (1:1.000, 1:0.500, 1:0.70, 1:0.41, 1:2.000) INCH series: 3R2E (1:1.000, 1:0.500, 1:0.64, 1:0.78, 1:1.29, 1:2.000) AB series: 4R4E (1:1.000, 1:0.500, 1:0.70, 1:0.81, 1:0.86, 1:1.15, 1:1.41, 1:2.000) 50% to 200% (1% increments)*1 *1 except for MF6531
Warm-up time	13.5 sec or less (w/o PCL ROM: ROM 12MB, 16MB model) 16.0 sec or less (with PCL ROM: ROM 32MB model)
First print time	Book: 7.7sec or less (A4), 7.6 sec or less (LTR) ADF: 12 sec or less (A4/LTR)
Cassette paper size	A4 or LGL/LTR
Multifeeder paper size	Width: 76.2 to 216 mm Length: 127 to 356 mm Weight: 56 to 128 g/m2
Cassette paper type	Plain paper (60 to 90 g/m2), recycled paper (60 to g/m2), colored paper (60 to 90 g/m2)
Multifeeder tray paper type	Plain paper (60 to 90 g/m2), recycled paper (60 to g/m2), colored paper (60 to 90 g/m2), transparency, label, postcard, thick paper (90 to 128 g/m2), envelope (COM10, Monarch, DL, ISOB5, ISO-C5)
Duplex paper type	Plain paper, colored paper, recycled paper
Cassette capacity	500 sheets (80 g/m2)
Multifeeder tray capacity	100 sheets (plain paper: 80g/m2) 80 sheets (heavy paper: 91 to 105g/m2) 50 sheets (heavy paper: 106 to 128g/m2) 40 sheets (label) 10 sheets (envelope, OHP) 50 sheets (post card)
Delivery tray stack	100 sheets (plain paper: 80g/m2) 80 sheets (heavy paper: 91 to 105g/m2) 50 sheets (heavy paper: 106 to 128g/m2) 40 sheets (label) 10 sheets (envelope, OHP) 50 sheets (post card)
Continuous reproduction	1 to 99 sheets
Non-image width (leading edge)	3.0 -/+2.5 mm
Non-image width (left/right)	2.5 -/+2.0 mm
Image mode	Yes (text, text/photo, photo)
Auto power off	yes

Energy save mode	yes (manually ON/OFF; auto OFF after specific time, auto ON after fax reception/print data reception)
Operating environment (temperature range)	15 to 30 deg C
Operating environment (humidity range)	10 to 80%
Operating environment (atmospheric pressure)	0.6 to 1.0 atm
Noise	Copying (A4/22cpm model):66.7 dB or less (fast mode) (LTR/23cpm model):67.05 dB or less (fast mode: reference)
Power supply rating	120V (50/60Hz), 230V (50/60Hz)
Power consumption (maximum)	120V: Approx. 780 kW (max.) 230V: Approx. 860 kW (max.)
Power consumption	Standby: TBD W (approx.; reference only) Operation: TBD W (approx.; reference only) Energy save stanby: 2 W or less (approx; reference only)
Ozone	0.02mg or less
Dimensions	520 mm (W) X 457mm (D) X 453mm (H): standard model 520 mm (W) X 457mm (D) X 581mm (H): with optional cassette unit
Weight	Approx. 10.8 lb(23.7kg) (including toner cartridge)
Option	Cassette unit, Hand set

1.2.6.2 ADF Specifications

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Original orientation	Face-down
Original position	Center reference
Original processing mode	- Single-sided document processing - Double-sided document processing
Original reading	Stream reading
Stack	small size *1: 50 sheets or less large size*2: 25 sheets or less *1: small size (A4R, B5R, A5R, B6, LTRR, SMTR) *2: large size (LGL)
Mixed original sizes	Same types of paper can be mixed.
Original AE detection	no
Original size recognition	no
Stamp	no
Operating environment	Same as that of host machine.

1.2.7 Function List

1.2.7.1 Printing Speed

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-1-7

Type		Single-sided		Two-sided	
		Cassette feed	**Manual feed**	**Cassette feed**	**Manual feed**
Plain paper	A4R	22	22	TBD	TBD
	B5R	-	13	-	TBD
	A5R	-	13	-	TBD
	LGL	18	18	TBD	TBD
	LTRR	23	23	TBD	TBD
	STMTR	-	13	-	TBD

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Type		Single-sided		Two-sided	
		Cassette feed	Manual feed	Cassette feed	Manual feed
Heavy paper 1/2/3	A4R	-	14	-	TBD
	B5R	-	6	-	TBD
	A5R	-	-	-	-
	LGL	14	14	TBD	TBD
	LTRR	-	13	-	TBD
	STMTR	-	6	-	TBD
Bond paper	A4R	-	6	-	-
	B5R	-	6	-	-
	A5R	-	-	-	-
	LGL	-	10	-	-
	LTRR	-	10	-	-
	STMTR	-	6	-	-
OHP	A4R	-	6	-	-
	LTRR	-	6	-	-
Envelope	Monarch	-	6	-	-
	COM10	-	6	-	-
	ISO-B5	-	6	-	-
	ISO-C5	-	6	-	-
	DL	-	6	-	-

Supplement:
- The above copy speed does not change if magnification is changed.
- The above copy speed does not change irrespective of whether paper is supplied from the cassette, the manual feed tray, or from the cassette feeding module.
- The copy speed may become down when the copies make continuously one minutes or more with the narrow width paper. The slowdown is reduced with the following user mode. User Mode: Additional Functions > Adjust/Cleaning > Spesial Mode P > ON

1.2.7.2 Types of Paper

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-1-8

Type		Paper size	Source		Duplex print
			Manual Feed Tray	Cassette	
Plain paper, eco paper, recycled paper (64-90g/m2)		A4R, B5R, A5R, LGL, LTRR, STMTR, EXER, 16KR*1, OFICIO, B-OFICIO, M-OFICIO, FOLIO, GLTRR, GLGL, FLSP	yes	yes	yes
Special paper	Heavy paper (90-128g/m2)	Width:: 76.2mm-216mm Length: 127mm-356mm	yes	no	no
	OHP	A4R, LTRR	yes	no	no
	Postcard	Postcard A6R modified	yes	no	no
	4-plane postcard	A4 modified	yes	no	no
	Label paper	A4R, LTRR	yes	no	no
	3-hole paper	LTRR	yes	yes	yes
	Transparency	A4R	no	yes	no
	Envelope	Com10, Monarch, DL, ISO-C5, ISO-B5	yes	no	no
*1: only for China					

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 2 Basic Operation

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

2.1 Construction 2-1
2.1.1 Functional Construction 2-1
2.1.2 Functional Block Diagram 2-2
2.1.3 Image Processor PCB 2-2
2.1.4 DC Controller PCB 2-3
2.1.5 Analog Processor PCB 2-4
2.1.6 Power Supply PCB 2-4
2.1.7 Relay PCB 2-4
2.1.8 Control Panel PCB 2-4
2.1.9 Network PCB （if equipped with network functions） 2-4
2.1.10 NCU PCB (if equipped with fax functions) 2-4
2.1.11 Modular Jack PCB (if equipped with fax functions) 2-4
2.2 Basic Sequence 2-4
2.2.1 Basic Sequence 2-4

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

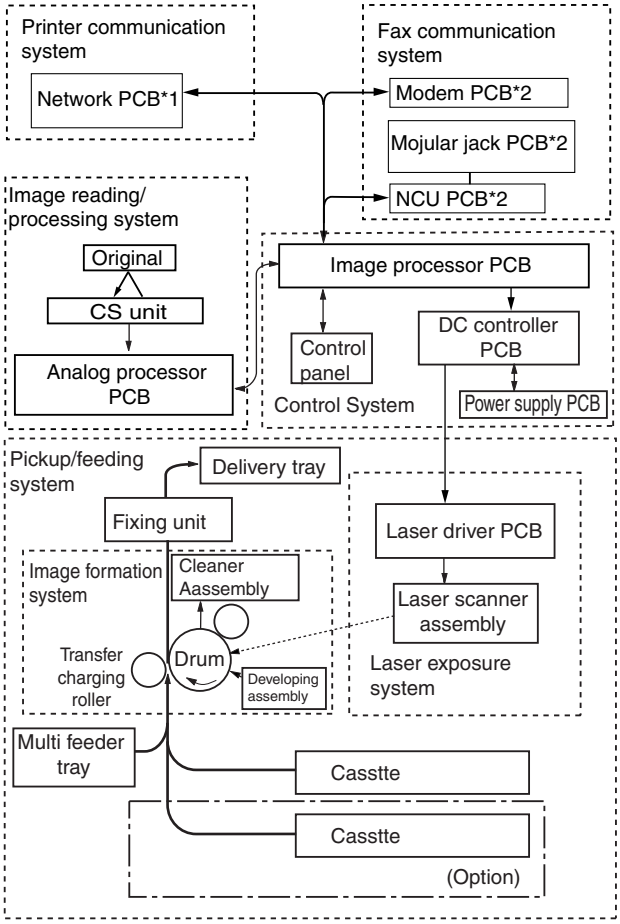
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

2.1 Construction

2.1.1 Functional Construction

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine may be divided into the following 7 functional blocks.



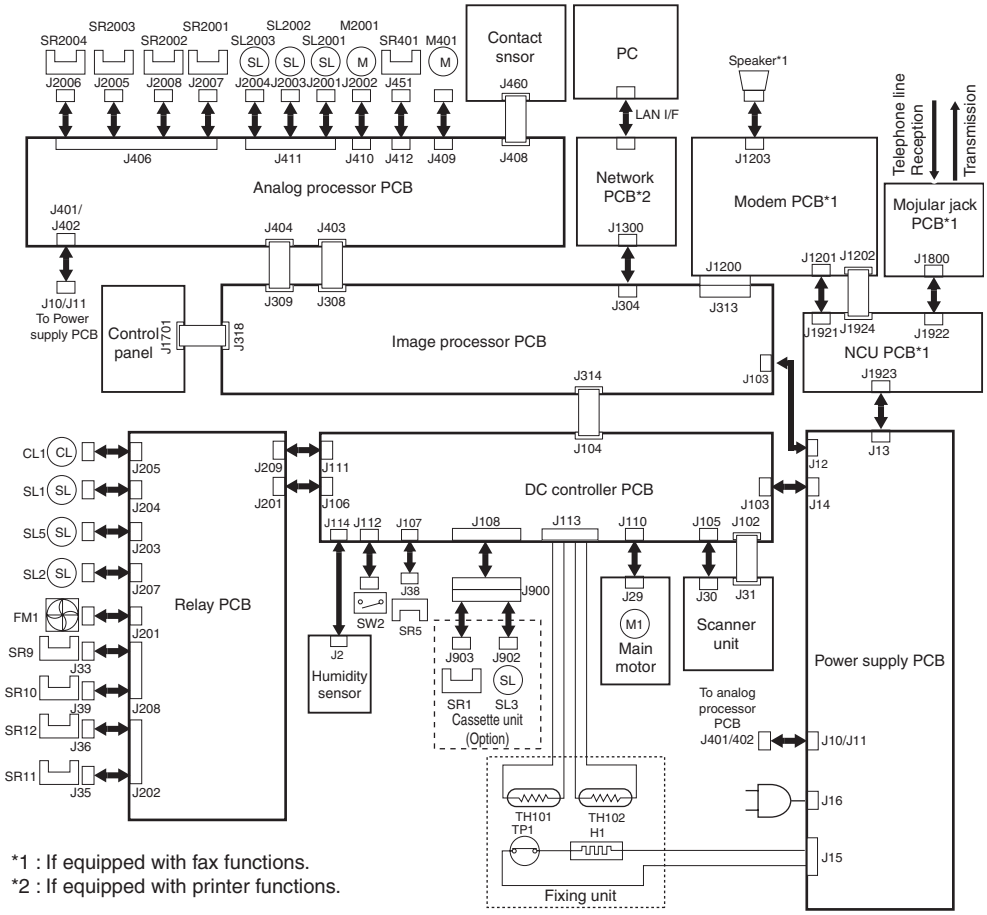
*1 : If equipped with printer functions.
*2 : If equipped with fax functions.

F-2-1

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

2.1.2 Functional Block Diagram

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



F-2-2

2.1.3 Image Processor PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1.function
The image processor PCB has the following functions.

Drive Control Block
The drive control mechanism acts on the reader motor and the ADF motor by the work of the ASIC and motor drive IC.

Control Panel Control Block
The control panel control block receives the state of control keys while sending/receiving data in serial communication with the control IC of the control panel PCB. Also, it sends LED and LCD signals to the control panel PCB.

Image Processing Control Block
- It subjects the digital image data from the analog processor PCB to enlargement/reduction processing, shading correction, smoothing, and other image processing, thereby converting it to 600x600-dpi image signals (VD0, VD01*, VDO2, VDO2*).
- It converts the analog image data from fax communication into 600x600-dpi image signals (VD0, VD01*, VDO2, VDO2*).
- It uses a horizontal sync signal (BD0*) as a trigger to send image signals (VD0, VD01*, VDO2, VDO2*) to the laser unit.
- The image data from the contact sensor is re-arranged, and the intensity of the contact sensor LED is controlled.

Smoothing
The 300 x 300-dpi image data from the PC is converted into image data equivalent of 1200 x 600 dpi; or, 600 x 600-dpi image data is converted into data equivalent of 2400 x 600-dpi.

Sensor Detection
It detects the state of each sensor of the reader unit and the ADF.

ESS Control
It controls the ESS function used to reduce the power consumption while the machine isin standby state.

Memory Storage
Image data is stored in SDRAM, and is retained for about 1 hr even after the power is removed by the work of the super capacitor mounted on the modem PCB. The system software and various data (e.g., user data, service data) are held by flash ROM.

Speaker Control (if equipped with fax functions.)
It turns on/off or control the volume of the error sound, key sound, and line monitor sound generated by the speaker.

MEMOÅF
The volume of the line monitor or the sound of the key sound or the error sound is adjusted in user mode.

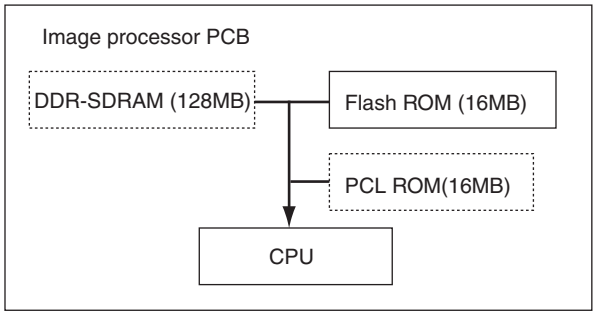
---

2. Construction
The image processor comes in different ROM types/sizes and RAM sizes according to models.

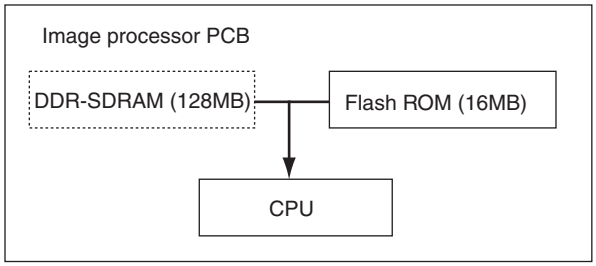
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

The firmware stored in the flash ROM may be either SYSTEM or BOOT.
Using the service support tool, the following 3 types of firmware may be upgraded: SYSTEM and BOOT stored in the flash ROM and the firmware stored ion PCL ROM.

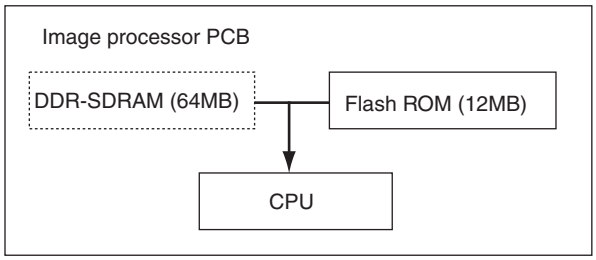
<with PCL functions>



<w/o PCL functions, with network functions>



<w/o PCL functions, w/o network functions>



F-2-3

2.1.4 DC Controller PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Fixing Heater Control Block
The fixing heater control block monitors the temperature reading of the thermistor to ensure that the temperature of the heater reaches a specific level. If an error is detected in the temperature of the heater, it stops the power to the heater.

High-Voltage Control Block
The high-voltage control block controls the high voltage for the primary charging roller, developing cylinder of the cartridge, transfer charging roller, and fixing film.

Drive Control Block
The drive control block controls the main motor, pickup solenoid, and fan.

Sensor Detection
It detects the state of the sensors in the pickup assemblies and the printer block, thereby monitoring the drive assembly.

Image Processor PCB Interface block
The image processor PCB interface block sends the horizontal sync signal (BD0*) to the image processor PCB. It also returns a state signal in response to a command signal (serial) from the image processor PCB, thereby communicating the state of the printer block to the image processor PCB.

Laser Control Block
The laser control block controls the drive of the laser diode of the laser scanner unit according to the image signals (VD01, VD01*, VD02, VD02*) from the image processor PCB. Also, it controls the intensity of the laser diode (auto power control) for each line of print data.

Horizontal Sync Signal Control
When the laser beam reaches the horizontal print start position, the laser beam detection signal (BDI*) from the laser scanner unit is detected, and the horizontal sync signal (BD0*) is sent to the image processor PCB. Also, the horizontal sync signal (BD*) is monitored for frequency of output.

Scanner Motor Control
The scanner motor is controlled so that the horizontal resolution of the print image is 600 dpi. Also, the laser beam detection signal (BDI*) from the laser scanner unit is detected to monitor the rotation of the scanner motor.

Cartridge Detection Mechanism
In wait state, the CPU on the DC controller PCB measures the voltage level of the cartridge detection signal (CRGSNS) a specific number of times to check the presence/absence of the cartridge when an AC bias is applied to the primary charging roller.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Toner Level Detection Mechanism
While the machine is in wait state, the toner level detection signal (ADDTNR; based on the comparison of the developing bias output and the antenna output inside the cartridge) occurring when the developing AC bias is detected during normal rotation to monitor the toner level inside the cartridge.

2.1.5 Analog Processor PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The analog image data read by the contact sensor is converted into digital image data and sent to the ASIC of the image processor PCB.

2.1.6 Power Supply PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Switching Regulator
The following is generated using power from the power outlet for loads: +24DC, +5 VDC, +5VRDC, +3.3VSDC, +3.3VRDC.

2.1.7 Relay PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The signals from the sensors/solenoids/clutches are sent to the DC controller PCB through the relay PCB.

2.1.8 Control Panel PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Key Detection and LCD/LED Drive
The keys are monitored, and the LCD and LEDs are driven.

LCD Function
The LCD consisting of 2 lines of 20 characters is controlled according to the display signals from the image processor PCB.

Serial Communication Control
The state of the control keys is monitored based on serial communications with the image processor PCB. LCD and LED drive data are received.

2.1.9 Network PCB Åiif equipped with network functionsÅj

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The communications with the PC are controlled. The image data from the PC is converted into print data for the machine, and is sent to the image processor PCB.

2.1.10 NCU PCB (if equipped with fax functions)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

2-Line/4-Line Conversion Circuit
Signals from a 2-line telephone line are converted into 4-line signals (transmission signals and reception signals). Also, the transmission signals from the image processor PCB are prevented from entering the reception circuit.

Dial Pulse Generation Circuit
The dial pulse generation circuit generates dial pulses by turning on and off the relay inside it according to the control signals from the image processor PCB. It then sends the dial signals to the telephone line by way of the modular jack PCB.

Off-Hook Detection Circuit
An off-hook state is detected with reference to the direct current flowing into the circuit, occurring when the telephone connected to the telephone terminal of the modular jack PCB is off the hook.

Line Voltage Conversion Circuit
The primary side of the NCU PCB is controlled using a line voltage of +48 VDC. In light of this, the DC component is cut by the capacitor, and only the audio signals are converted into voltages suited to the modem level.

2.1.11 Modular Jack PCB (if equipped with fax functions)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

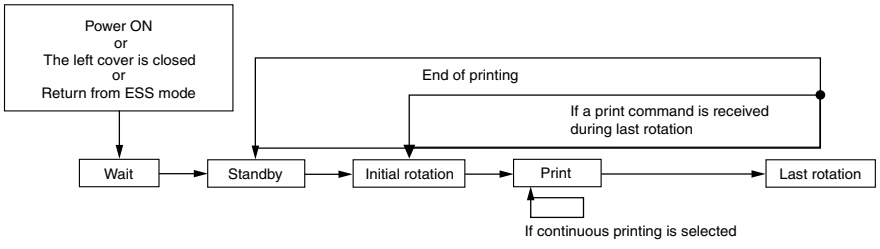
The signals from the 2 modular jacks (for telephone line and telephone connection) are communicated to the line voltage conversion circuit of the NCU PCB, and the signals from the fax are communicated to the telephone line.

2.2 Basic Sequence

2.2.1 Basic Sequence

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine's sequence of operation is controlled by the CPU on the image processor PCB and the CPU on the DC controller PCB.
The following figure shows the sequential flow, and table provides descriptions of the periods involved.



F-2-4

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

T-2-1

Period	Definition	Purpose	Remarks
WAIT (wait)	From when the power is turned on until the main motor is turned on and stopped.	The machine's mechanical and electrical states are checked.	A check is made on the presence/absence of a cartridge and for paper remaining inside the machine. The machine also shifts the WAIT state when the left cover is closed while power is on, or after returning from ESS mode.
STBY (standby)	After the end of WAIT, unit the Start key is pressed.	The machine is ready for a print command.	
INTR (initial rotation)	After a press on the Start key, until the leading edge is detected by the paper leading edge sensor.	The machine starts up process conditions and picks up paper for printing.	The fixing heater is subjected to temperature contro (start-up temperature control, paper passage temperature control); scanner rotation speed adjustment and ATVC control are executed.
PRINT (print)	After the registration sensor detects the leading edge of paper, until the delivery sensor detects the trailing edge of paper.	The DC controller PCB generates the BD0* signal, and the image processor PCB sends VD0* signal and VD0 signal, thereby forming a latent image on the photosensitive drum and turning it into a toner image.	
LSTR (last rotation)	From when printing ends until the main motor stops.	The drum surface is made free of potential and the transfer charging roller is cleaned.	After last rotation, the machine shifts to standby to wait for a print command, in response to which it immediately shifts to initial rotation.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 3 Original Exposure System

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

3.1 Basic Constraction 3-1
3.1.1 Specifications, Control Methods, and Functions 3-1
3.1.2 Major Components 3-1
3.2 Basic Sequence 3-2
3.2.1 Basic Sequence at Power-on 3-2
3.2.2 Basic Sequence after Depression of Start Key (Book mode, One Sheet of original) 3-2
3.2.3 Basic Sequence after Depression of Start Key (ADF Mode, One Sheet of Original) 3-3
3.3 Various Control 3-3
3.3.1 Enlargement/Reduction 3-3
3.3.1.1 Magnification Change in Vertical Scan Direction 3-3
3.3.1.2 Magnification Change in Horizontal Scan Direction 3-3
3.3.2 Dirt Sensor Control 3-4
3.3.2.1 Outline 3-4
3.4 Parts Replacement Procedure 3-5
3.4.1 Copyboard Glass 3-5
3.4.1.1 Removing the Copyboard Glass 3-5
3.4.2 Analog Processor PCB 3-5
3.4.2.1 Removing the Analog Processor PCB 3-5
3.4.3 Reader Motor 3-5
3.4.3.1 Removing the Reader Motor 3-5
3.4.4 Contact Sensor 3-5
3.4.4.1 Removing the Contact Sensor 3-5
3.4.4.2 Procedure after Replacing the CS 3-6
3.4.5 Reader Home Position Sensor 3-6
3.4.5.1 Removing the Reader Home Position Sensor 3-6

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

3.1 Basic Constraction

3.1.1 Specifications, Control Methods, and Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-3-1

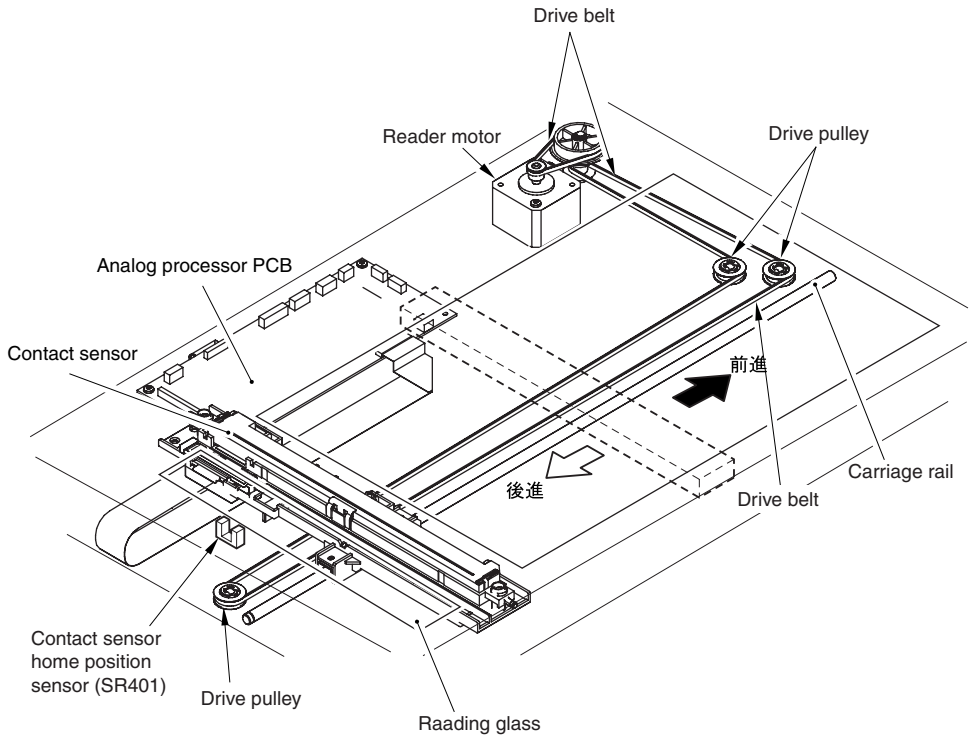
Item	Function/Method
Exposure light source	LED
Original scan	In BOOK mode: Original scan is performed by moving the contact sensor (CS).
	When ADF is used: Original stream reading is performed with the contact sensor (CS) fixed.
Scan resolution	600 dpi (vertical scan) x 600 dpi (horizontal scan) (Color send: 300 dpi horizontal scan)
Gradation	256
Carriage position detection	Contact image sensor (CIS) HP sensor (SR401)
Magnification range	50% to 200%
	Vertical scan direction: Image processing is by image processor PCB
	Horizontal scan direction:
	BOOK mode: Carriage movement speed change and image processing by image processor PCB *1
	ADF mode: Original feed speed change and image processing by image processor PCB *1
Lens	Rod lens array
CMOS sensor	Number of lines: 1
	Number of pixels: Total 5148 (incl. 5104 effective pixels)
	Maximum original scan width: 216 mm
CIS drive control	Drive control by reader motor (M401)
Original size detection	no

3.1.2 Major Components

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The exposure system consists of the following major components:
- contact sensor used to read originals
- reader motor, drive pulley, drive belt, carriage, and carriage rail used to move the contactsensor
- The analog processor PCB is used to convert the analog image data colleted by the econtact sensor into digital image data.

The image reading mechanism is controlled based on the drive signals from the image processor PCB, thereby moving the contact sensor to read the original placed on thecopyboard glass.
When the ADF is used, the contact sensor is moved to stream reading position, and the originals are read when they are moved by the ADF.



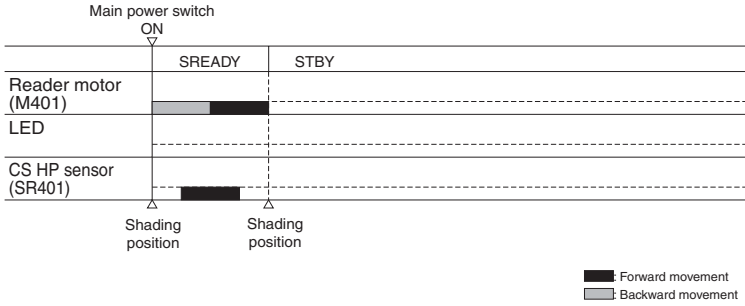
F-3-1

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

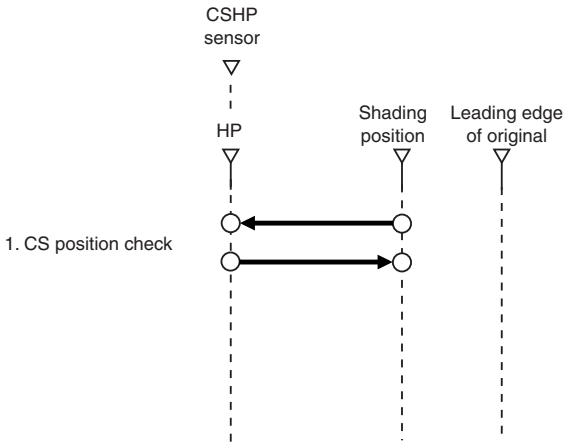
3.2 Basic Sequence

3.2.1 Basic Sequence at Power-on

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



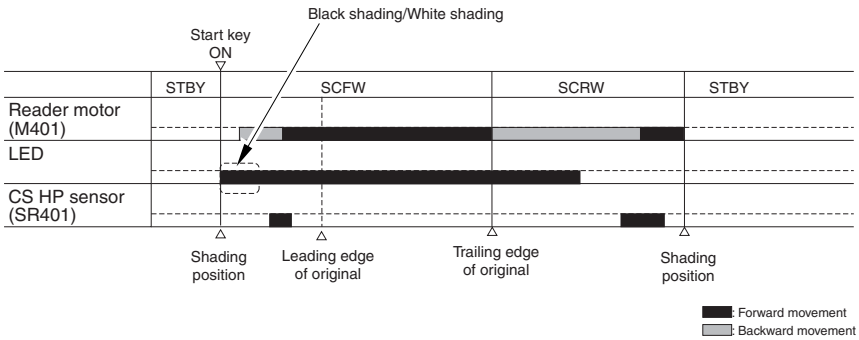
F-3-2



F-3-3

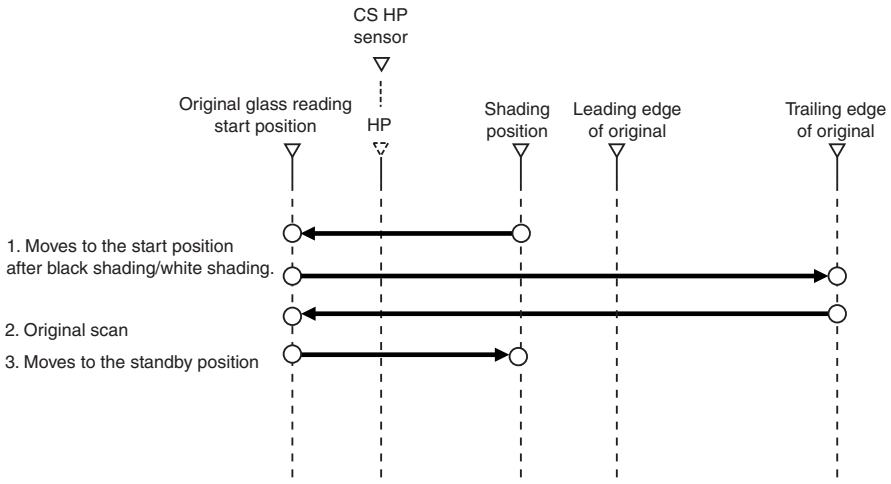
3.2.2 Basic Sequence after Depression of Start Key (Book mode, One Sheet of original)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



F-3-4

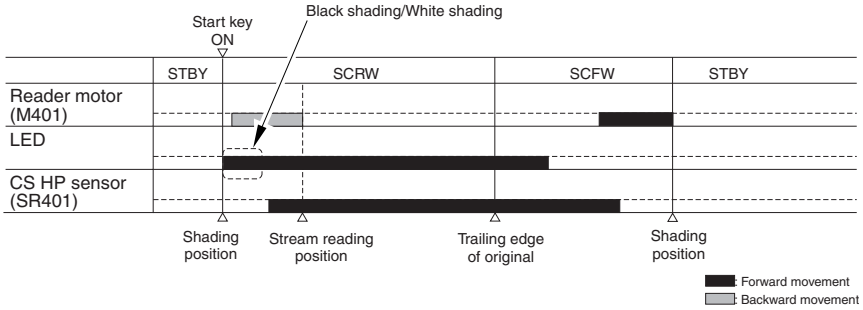
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com


CS HP sensor
Original glass reading start position
HP
Shading position
Leading edge of original
Trailing edge of original
1. Moves to the start position after black shading/white shading.
2. Original scan
3. Moves to the standby position

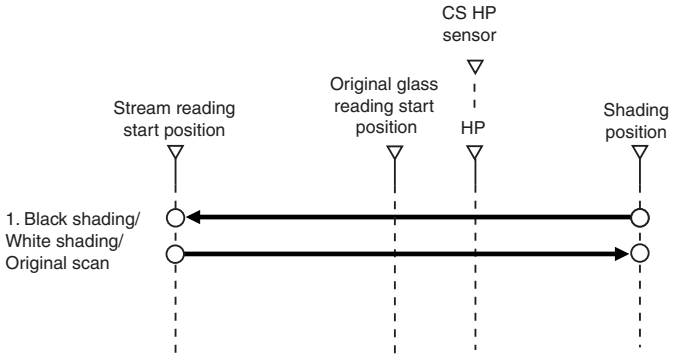
F-3-5

3.2.3 Basic Sequence after Depression of Start Key (ADF Mode, One Sheet of Original)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



F-3-6



F-3-7

3.3 Various Control

3.3.1 Enlargement/Reduction

3.3.1.1 Magnification Change in Vertical Scan Direction

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

In the Book mode or when the ADF is used
In the vertical scan direction, the image is read at 100%. Magnification is changed by processing data on the image processor PCB.

3.3.1.2 Magnification Change in Horizontal Scan Direction

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

In the horizontal scan direction, magnification is changed as follows depending on the selected magnification rate:
1) When magnification is reduced to 50-99%
Data is processed on the image processor PCB with the original scan speed held at 118 mm/sec.

2) When magnification is increased to 100-200%
The original scan speed (in the Book mode)/original feed speed (when the ADF is used) is changed within the range of 118 mm/sec to 59 mm/sec depending on the selected magnification rate. Data is not processed on the image processor PCB.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

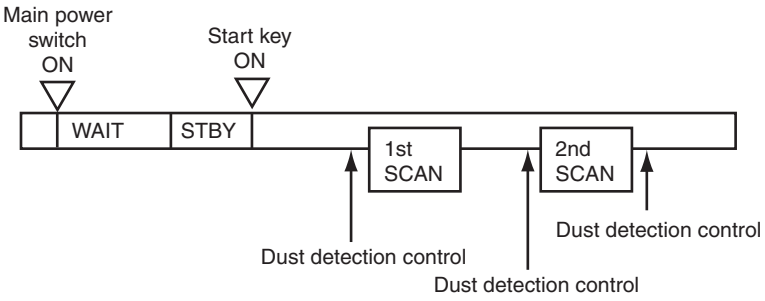
3.3.2 Dirt Sensor Control

3.3.2.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

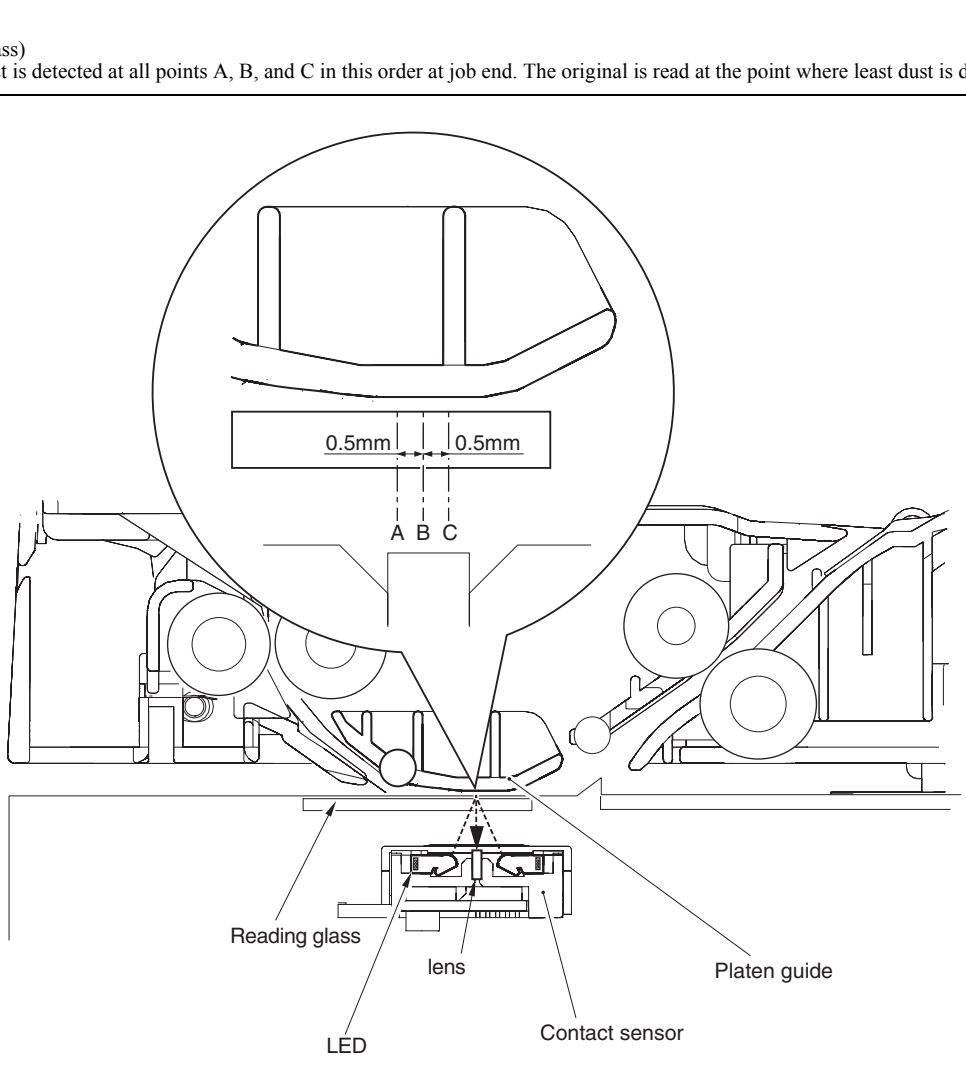
The machine changes the original read position or corrects the read image depending on the presence/absence of dust on the stream reading glass or ADF platen guide, thus preventing dust from showing up in the image. This control is performed only when the ADF is used and it is closed.

[Control Timing]
- At job end
- Immediately before scanning (one sheet at a time)



F-3-8

[Description of Control]
- At job end (Dust detection)
The contact sensor (CS) checks the light reflected by the ADF platen guide surface at the read position for presence/absence of dust. After completion of a job, dust detection is performed three times. First, dust detection is performed once at position A. If no dust is detected at position A, dust detection is performed twice there. If no dust is detected, the original is scanned at position A. If dust is detected at position A, move to position B and dust detection is performed twice at position B. If no dust is detected at position B, the original is scanned at position B. If dust is also detected at position B, move to position C and dust detection is performed once at position C. If dust is also detected at position C, a relevant message is displayed on the operation panel. In this case, move back to position A and the original is scanned at position A.



F-3-9

- Immediately before scanning (one sheet at a time)
The contact image sensor (CIS) does not move to detect dust.
The original is read at the position determined at job end or start. If presence of dust is detected there, the read image is corrected.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

T-3-2

Point	Description
A	Read reference position
B	out 0.5 mm from the reference position to the inside of the roller
C	About 1.0 mm from the reference position to the inside of the roller

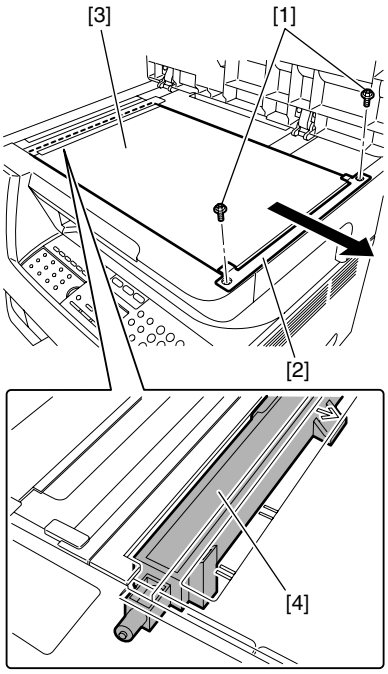
3.4 Parts Replacement Procedure

3.4.1 Copyboard Glass

3.4.1.1 Removing the Copyboard Glass

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the two screws [1], and then remove the glass holder [2].
2) Slide the copyboard glass [3] to remove it.



F-3-10

Take care not to touch the contact sensor[4] when removing the copyboard glass [3].

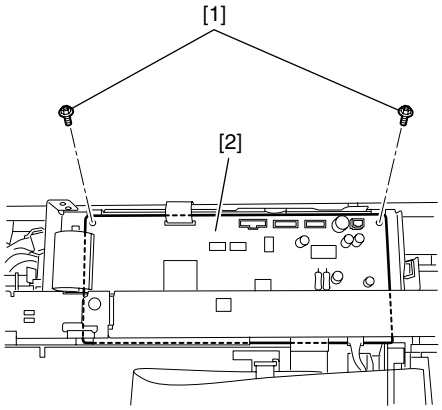
3.4.2 Analog Processor PCB

3.4.2.1 Removing the Analog Processor PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

MEMO:
This machine stores adjustment values in the image processor PCB, not the analog processor PCB.
Accordingly, you need not input adjustment values after replacing the analog processor PCB.

1) Remove the ADF.
2) Remove the copyboard glass, reader rear cover (small), and leader rear cover.
3) Disconnect all connectors and flexible cables from the analog processor PCB.
4) Remove the two screws [1], and then remove the analog processor PCB [2].



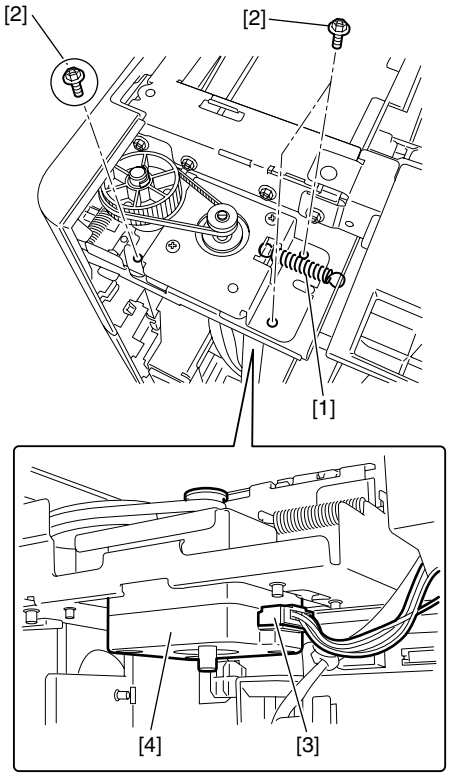
F-3-11

3.4.3 Reader Motor

3.4.3.1 Removing the Reader Motor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the ADF.
2) Remove the reader rear cover (small), reader cover, and rear cover.
3) Remove the reader motor [4] by removing one spring [1], three screws [2], and one connector [3].



F-3-12

When reinstalling the reader motor, attach the spring [1] with the three screws [2] fastened temporarily, tighten the circled screw [2] tightly, and finally tighten the remaining two screws [2] tightly.

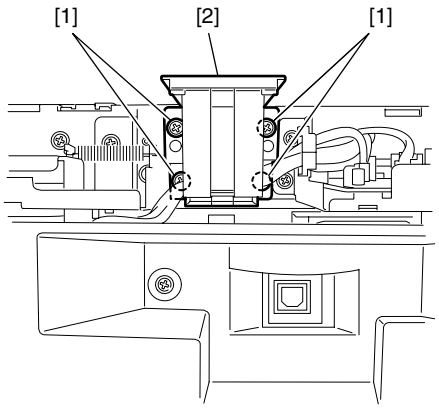
3.4.4 Contact Sensor

3.4.4.1 Removing the Contact Sensor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

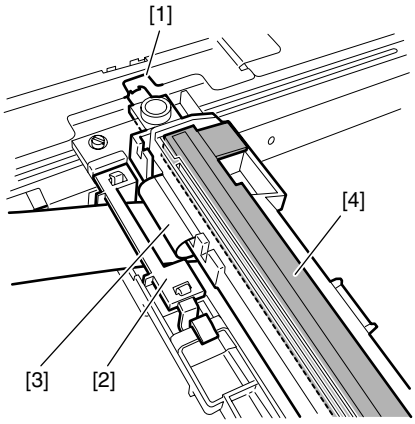
1) Remove the ADF.
2) Remove the copyboard glass and reader rear cover.
3) Remove the four screws [1], and then remove the ADF base (left) [2].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



F-3-13

4) Holding the belt, move the contact sensor unit to the cutout [1] in the reader frame.
5) Remove the cable holder [2] and flexible cable [3] to remove the contact sensor [4].



F-3-14

3.4.4.2 Procedure after Replacing the CS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

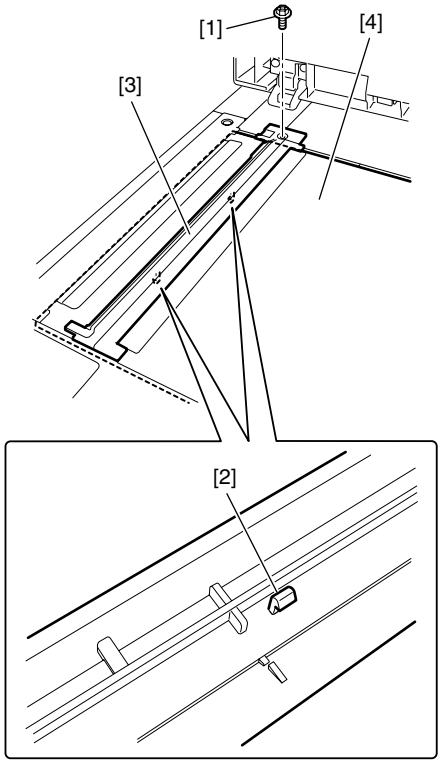
After replacing the contact sensor (CS), go through the following steps to perform inter-channel output correction:
1) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
2) Press the arrow key on the touch panel to display "TEST MODE".
3) Press [OK].
4) Press the [2] key to display "SCAN TEST".
5) Press the [1] key to display "SHADING".
6) Press [OK].
After completion of the above procedure, the contact sensor output is compensated and parameters are set automatically.
After completion of automatic adjustment, "OK" is displayed.

3.4.5 Reader Home Position Sensor

3.4.5.1 Removing the Reader Home Position Sensor

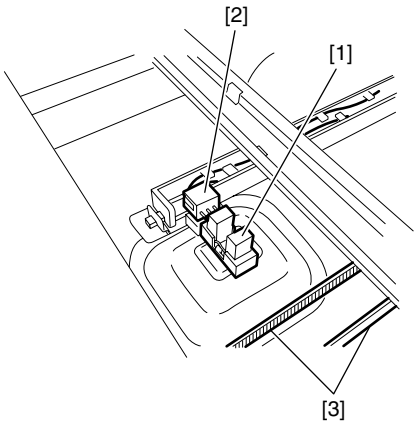
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

1) Remove the copyboard glass.
2) Remove one screw [1] and release the two claws [2] to remove the jump mount [3].
3) Remove the reading glass [4].



F-3-15

4) Taking care not to break the hook, remove the home position sensor [1] with a flathead screwdriver. Next, disconnect the connector [2]. If the contact sensor unit is over the reader home position sensor, move the contact sensor unit to an appropriate position by holding the belt [3].



F-3-16

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 4 Original Feeding System

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

4.1 Basic Constraction 4-1
4.1.1 Outline 4-1
4.1.2 Drive Mechanism 4-1
4.2 Basic Operation 4-2
4.2.1 Outline of Operation Mode 4-2
4.2.2 Document Size Detection 4-3
4.2.3 Paper Pickup Operation 4-4
4.2.4 Reversal Operation 4-4
4.2.5 Delivery Operation 4-5
4.3 Detection Jams 4-6
4.3.1 Outline 4-6
4.4 ADF 4-7
4.4.1 ADF 4-7
4.4.1.1 Removing the ADF 4-7
4.4.2 External Covers 4-7
4.4.2.1 Removing the Front Cover 4-7
4.4.2.2 Removing the Rear Cover 4-7
4.4.2.3 Detaching the Open/Close cover 4-8
4.4.2.4 Removing the Pickup Tray 4-8
4.4.3 Feed Frame Unit 4-9
4.4.3.1 Removing the Feed Frame Unit 4-9
4.4.4 Drive Unit 4-9
4.4.4.1 Removing the Drive Unit 4-9
4.4.5 Pick-up/Feed Roller Unit 4-9
4.4.5.1 Removing the Pickup/Feed Roller Unit 4-9
4.4.6 Pick-up Roller 4-9
4.4.6.1 Removing the Pickup Roller 4-9
4.4.7 Feed Roller 4-10
4.4.7.1 Removing the Feed Roller 4-10
4.4.8 ADF Motor 4-10
4.4.8.1 Removing the ADF Motor 4-10
4.4.9 Document Set Sensor 4-10
4.4.9.1 Removing the Document Set Sensor 4-10
4.4.10 Document Edge Sensor 4-11
4.4.10.1 Removing the Original Placement Sensor 4-11
4.4.11 Registration Sensor 4-11
4.4.11.1 Removing the Registration Sensor 4-11
4.4.12 Separation Sensor 4-11
4.4.12.1 Removing the Separated Paper Sensor 4-11
4.4.13 Pick-up Solenoid 4-11
4.4.13.1 Removing the Pickup Solenoid 4-11
4.4.14 Registration Solenoid 4-12
4.4.14.1 Removing the Registration Solenoid 4-12
4.4.15 Release Solenoid 4-12
4.4.15.1 Removing the Release Solenoid 4-12
4.4.16 Separation Pad 4-12
4.4.16.1 Removing the Separation Pad 4-12

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

4.1 Basic Constraction

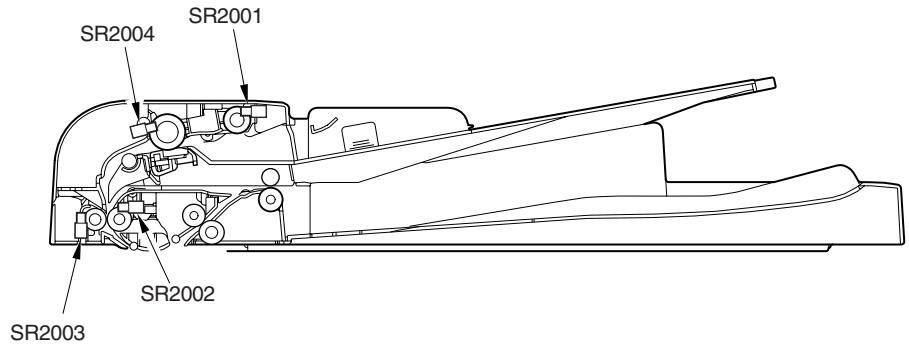
4.1.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The ADF is a feeding device used exclusively for stream reading, and its series of operations (original pickup, feeding, delivery) is performed using the drive of the ADF motor (M2001).
An original picked from the original placement assembly is controlled so that its movement will match the read start timing of the host machine's contact sensor. Then, the original is moved as far as stream reading position, read by the contact sensor (for collection of analog image data), and sent to the delivery assembly.
The ADF has 4 sensors to monitor the state of the original. The names and the functions of the sensors are as follows:

T-4-1

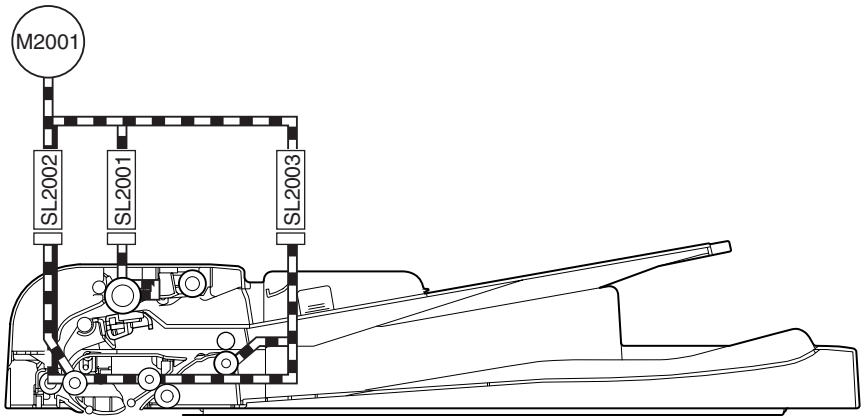
Symbol	Sensor	Function
SR2001	Original set sensor	Detects the presence/absence of an original in the original placement assembly.
SR2002	Original placement sensor	Detects the paper feed status and triggers scanning.
SR2003	Registration sensor	Detects the timing at which the leading edge of an original is made to arch at the ADF registration roller.
SR2004	Separated Paper Sensor	Detects the paper feed status and triggers pickup of the next original.



F-4-1

4.1.2 Drive Mechanism

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



F-4-2

Symbol	Name
SL2001	Pickup solenoid
SL2002	Registration solenoid
SL2003	Roller release solenoid
M2001	ADF motor

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

4.2 Basic Operation

4.2.1 Outline of Operation Mode

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

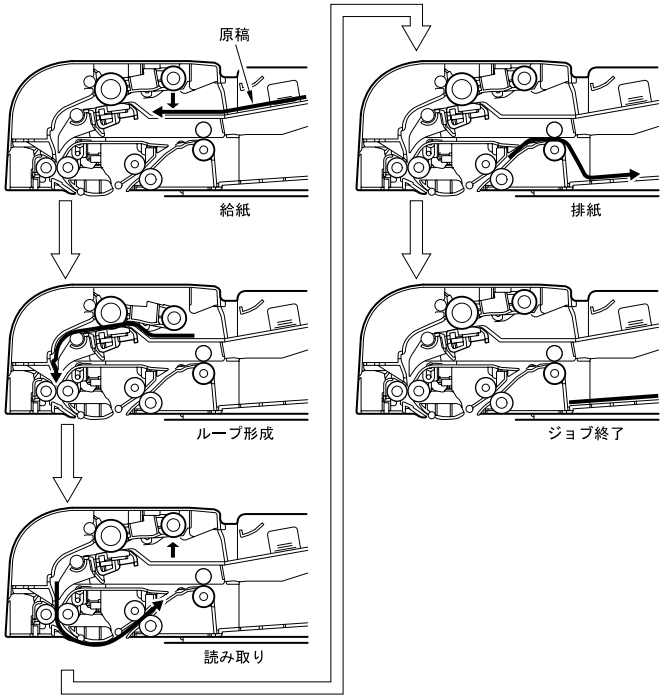
This machine has 2 operation modes. This machine operates in the operation mode specified by the host machine to perform printing. Operation mode names, brief outline of operations, and associated print modes are given in the following table:

T-4-2

Operation mode name	Outline of operation	Associated print mode
[1] Forward pickup/delivery	Picks up, reads, and then delivers an document.	Single-sided document > Simplex printing Single-sided document > Duplex printing (This operation is performed for documents with the same width.)
[2] Forward feed/reversal delivery	Picks up, reads, reverses, and delivers an document.	Double-sided document > Duplex printing Double-sided document > Simplex printing (This operation is performed for documents with the same width.)

[1] Forward Pickup/Delivery Operation
The document flows as shown below.

MEMO:
This operation is performed for all single-sided documents irrespective of whether document widths are the same.

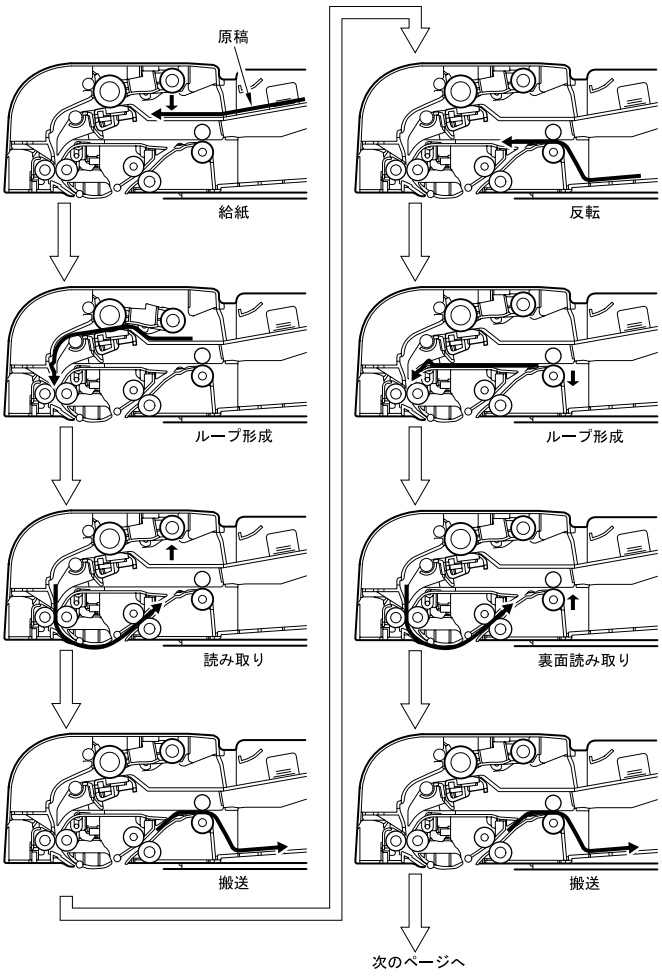


F-4-3

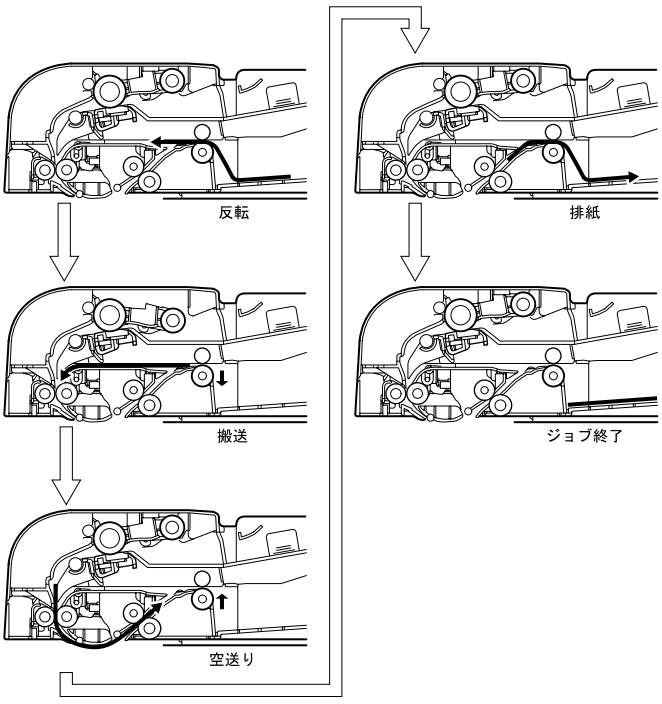
[2] Forward Pickup/Reversal Delivery Operation
The document flow is shown below.

MEMO:
This operation is performed for all double-sided documents irrespective of whether document widths are the same.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



F-4-4



F-4-5

4.2.2 Document Size Detection

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This machine detects the original size while feeding the original. (Same-type mixed printing and banner paper printing are included.)
The document feeder tray does not have a sensor for detecting the paper size.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

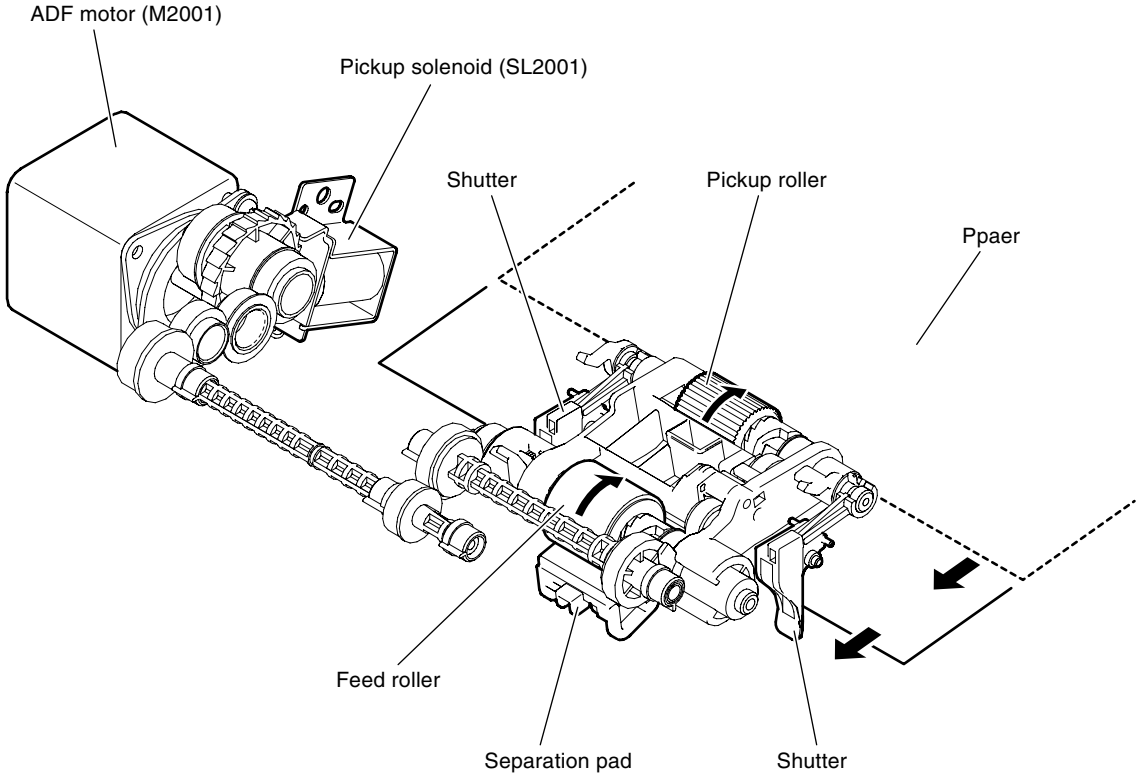
T-4-3

Function	Description	Sensor used (symbol)
Document length detection	Detects the document length according to the distance from the position where the original placement sensor (SR2002) turns on to the position where the original placement sensor (SR2002) turns off.	Original placement sensor (SR2002)

4.2.3 Paper Pickup Operation

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The pickup unit consists of pickup and transport rollers. When the Start Key signal or Original Feed signal is input, the ADF motor (M2001) turns in the normal direction and then the pickup solenoid (SL2001) turns on. The pickup unit lowers and the pickup and transport rollers rotate to feed the paper. The shutter moves up in conjunction with the pickup unit. A separation pad is used to prevent multiple sheets from being fed at the same time.
When the original reaches the registration roller where is it looped, the pickup solenoid (SL2001) turns off and the pickup unit roller rises. Next the registration solenoid (SL2002) turns on and the original is fed by the registration roller. At this time, the pickup roller drive shaft which is rotated via the spring one-way clutch is stationary at the highest position in the pickup unit. The pickup roller incorporating a one-way clutch is rotated by the friction against the paper.



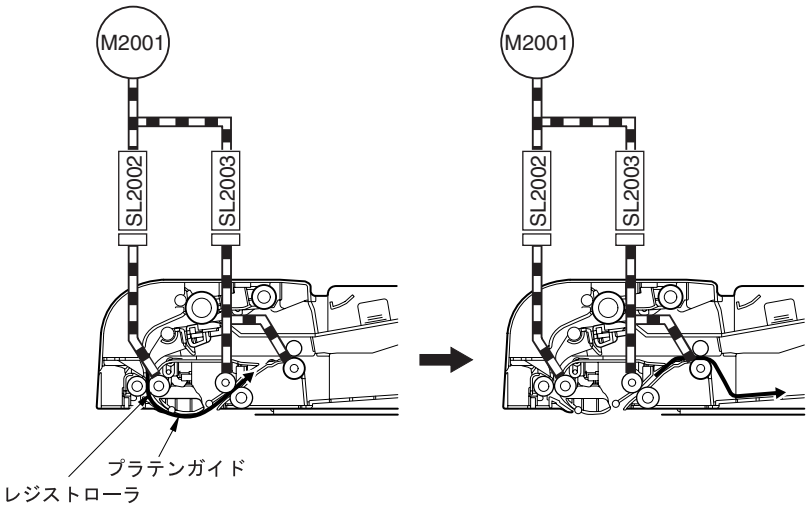
F-4-6

4.2.4 Reversal Operation

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

There are two types of reversal operations, reversal from the top side to the reverse side and reversal from the reverse side to the top side. However, since their operating principles are the same, only reversal from the top side to the reverse side is described below.

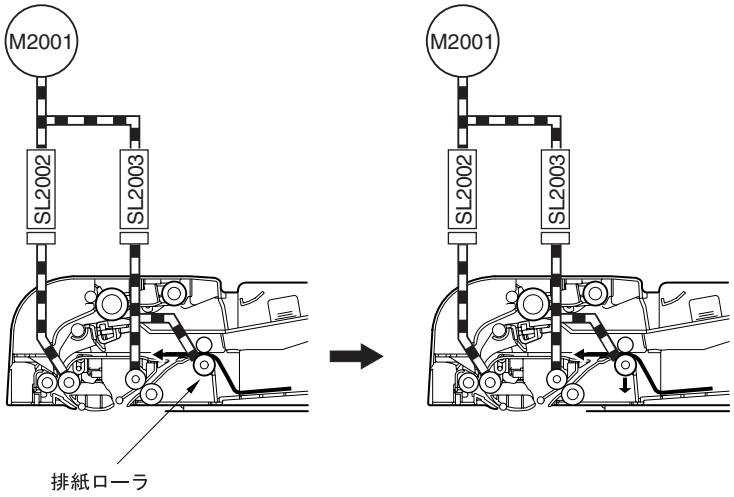
a. When the ADF motor (M2001) turns and the registration solenoid (SL2002) turns on, the registration roller turns to feed the paper along the platen guide for surface scanning. After completion of scanning, the paper is fed to the delivery unit by the transport roller 1 and delivery roller.



F-4-7

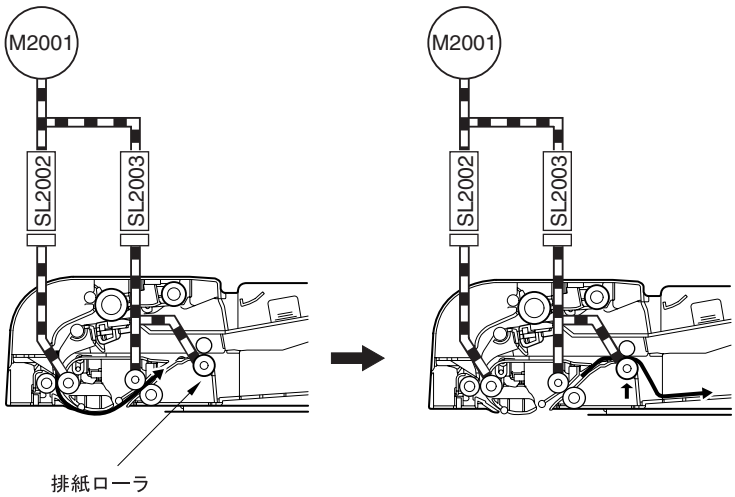
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

b. Reversal/Feed 1
When the predetermined time has lapsed since the trailing edge of the fed original passed through the document edge sensor (SR2002), the ADF motor (M2001) stops. Immediately after this, the ADF motor turns in the reverse direction to feed the original to the registration roller and the shift solenoid (SL2003) turns on to release the delivery roller.



F-4-8

c. Reversal/Feed 2
The original is fed by the ADF motor (M2001), passing through the original scanning unit.
Thus, the original has been reversed. After completion of re-pickup, the shift solenoid (M2003) turns off at completion of scanning of the reverse side of the original. After this, re-reversal, feed, and delivery operations are performed.

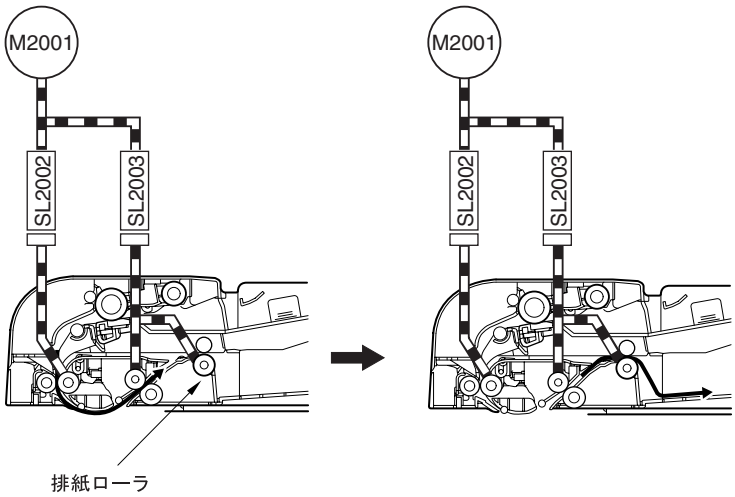


F-4-9

4.2.5 Delivery Operation

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The original finished with stream reading on the original glass is delivered to the original delivery unit as described below.
a. The original that passed through the original feed/delivery position is fed by the delivery roller which is turned by the ADF motor (M2001). The delivery roller is normally held pressurized. It is released when the shift solenoid (SL2003) turns on to reverse the original for duplex printing.



F-4-10

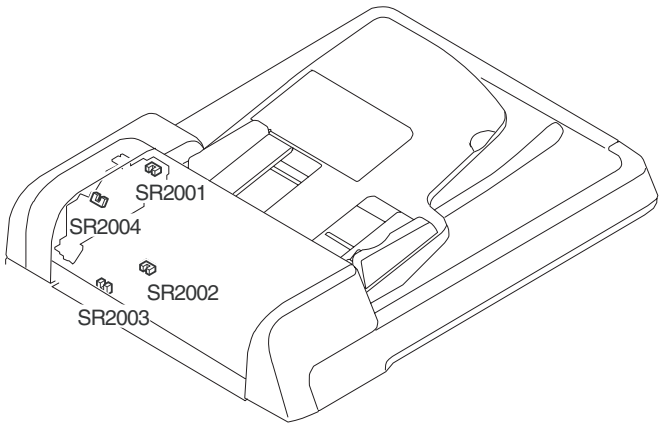
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

4.3 Detection Jams

4.3.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This machine detects a jam using the sensors shown below. Document jam check timings are stored in the ROM on the image processor PCB to check whether a jam has occurred according to presence/absence of the document at the relevant sensor position.
When a jam occurs, the host machine stores its code.
Jam codes can be checked by outputting a jam error log report in the service mode of the host machine.



F-4-11

T-4-4

SR2001: Document set sensor

SR2002: Document edge sensor

SR2003: Registration sensor

SR2004: Separation rear sensor

T-4-5

Code	Name	Sensor No.	Description
0000	Unknown jam	-	Other errors
0007	Initial stationary	SR2002, R2003, SR2004	Paper is detected in the transport path before the DADF starts initial operation.
0008	Document edge sensor delay	SR2002	The document sdge sensor does not detect paper when the paper has been fed by the predetermined distance since reception of a pickup request.
0009	Document edge sensor stationary	SR2002	The trailing edge of paper is not detected when the paper has been fed by the predetermined distance since detection of it by the docement edge sensor.
000a	Paper absence (Pull out the document.)	SR2001	The Document set sensor has been held off since start of pickup.
0010	Pickup NG	SR2003	The registration sensor has been held off since paper pickup started.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

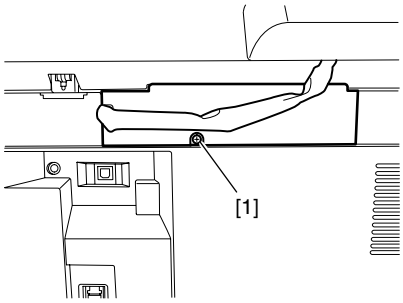
4.4 ADF

4.4.1 ADF

4.4.1.1 Removing the ADF

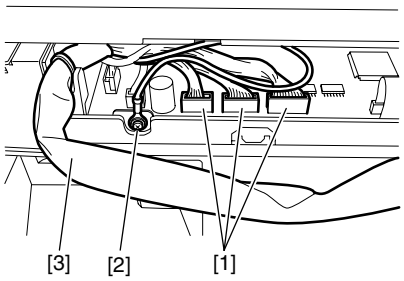
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove one screw [1], and then detach the reader rear cover (small).



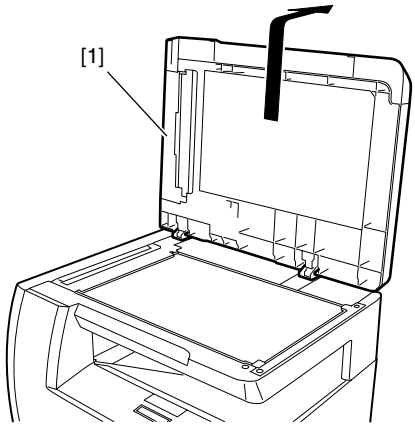
F-4-12

2) Remove the three connectors [1] and one screw [2] to disconnect the cable [3].



F-4-13

3) Open the ADF [1] vertically, and remove it by lifting upward.



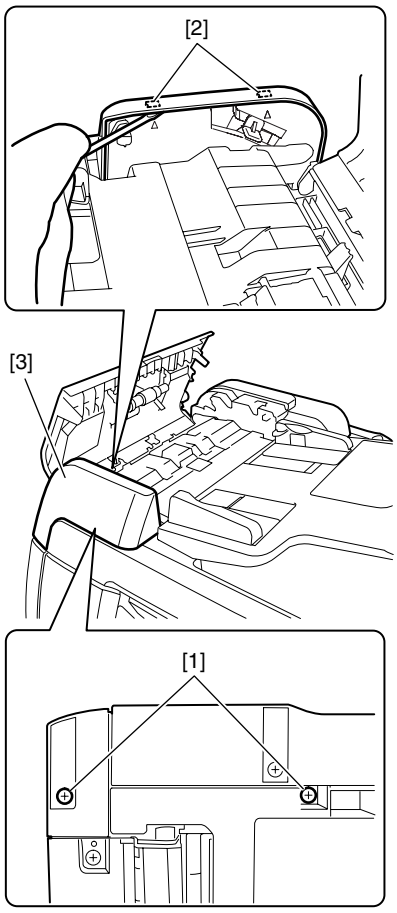
F-4-14

4.4.2 External Covers

4.4.2.1 Removing the Front Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the two screws [1], release two hooks [2], and then detach the front cover [3].



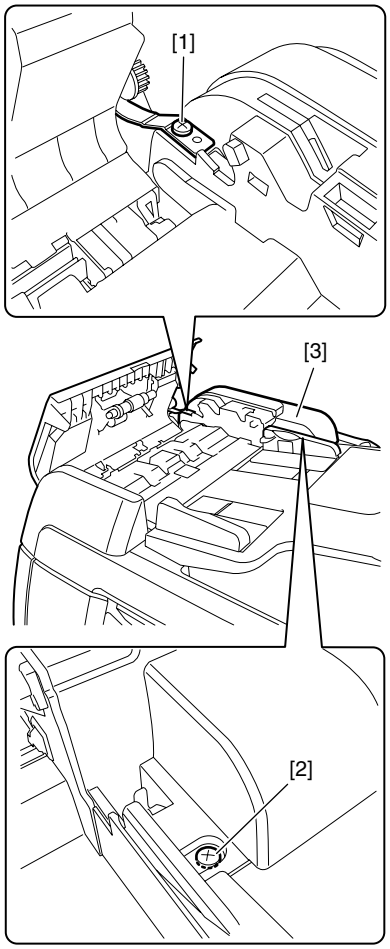
F-4-15

4.4.2.2 Removing the Rear Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the stopper screw [1].
2) Open the pickup tray, remove the screw [2], and then detach the rear cover [3].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

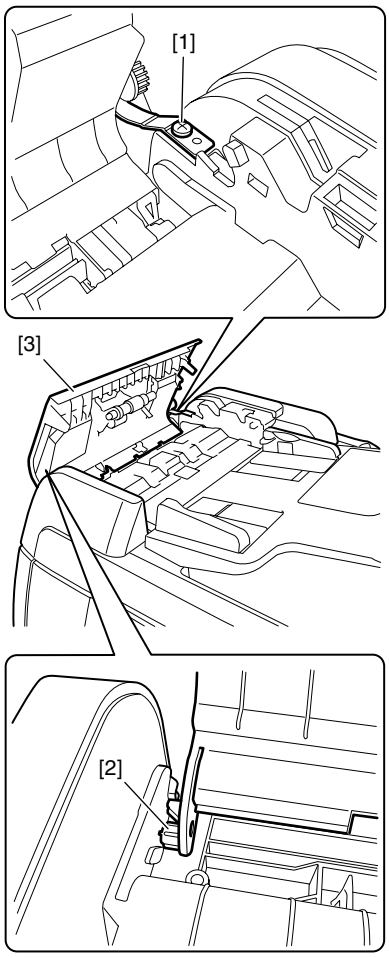


F-4-16

4.4.2.3 Detaching the Open/Close cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the screw [1], and then remove the stopper.
2) Remove the front and rear shafts [2] of the open/close cover, and then detach this cover [3].

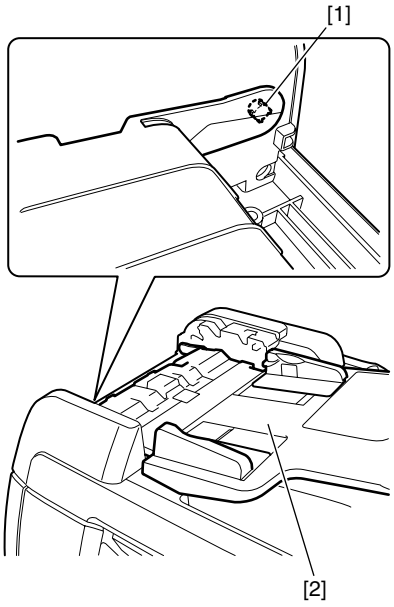


F-4-17

4.4.2.4 Removing the Pickup Tray

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the open/close cover, or open the open/close cover by removing the open/close cover stopper.
2) Remove the left and right shafts [1] of the pickup tray, and then remove the pickup tray [2].



F-4-18

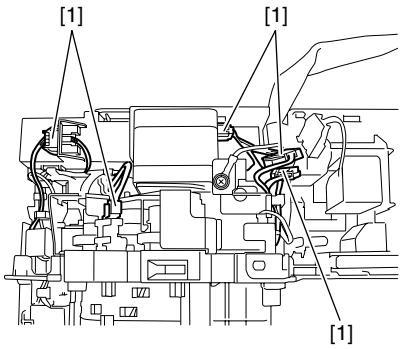
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

4.4.3 Feed Frame Unit

4.4.3.1 Removing the Feed Frame Unit

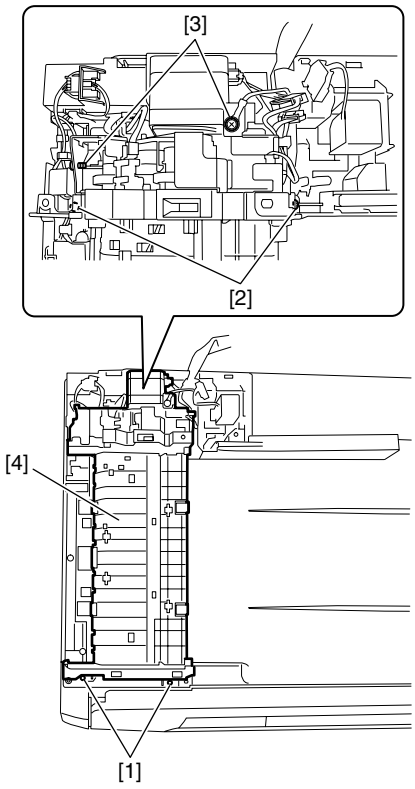
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the front cover, rear cover, open/close cover, and pickup tray.
2) Disconnect the five connectors [1].



F-4-19

3) Remove the two front screws [1], two rear screws [2], and two grounding screws [3] to remove the feed frame unit [4].



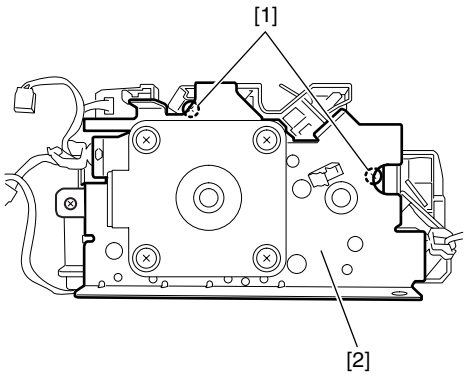
F-4-20

4.4.4 Drive Unit

4.4.4.1 Removing the Drive Unit

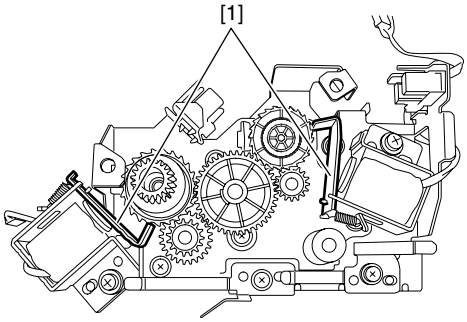
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the feed frame unit.
2) Remove the three screws [1], and then remove the drive unit [2].



F-4-21

When reinstalling the drive unit, make sure that the pickup solenoid lock plate [1] is engaged with the gear.



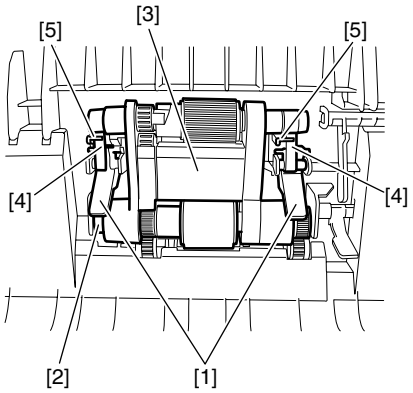
F-4-22

4.4.5 Pick-up/Feed Roller Unit

4.4.5.1 Removing the Pickup/Feed Roller Unit

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the open/close cover.
2) Remove the shafts, and then remove the two shutters [1].
3) Press the support plate with your fingers to remove the shaft [2], and then remove the pickup/feed roller unit [3].



F-4-23

When reinstalling the pickup/feed roller unit, care should be taken to the following:
1. The arms [4] must be behind the shutters [1].
2. The arms [4] must be behind the ribs [5].

4.4.6 Pick-up Roller

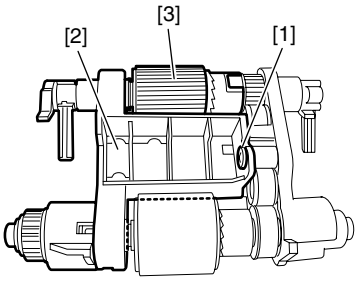
4.4.6.1 Removing the Pickup Roller

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Base MF6560PL / / LaserBase MF6580PL

1) Remove the pickup/feed roller unit.
2) Remove the screw [1], and then remove the roller bracket [2].
3) Remove the pickup roller [3].



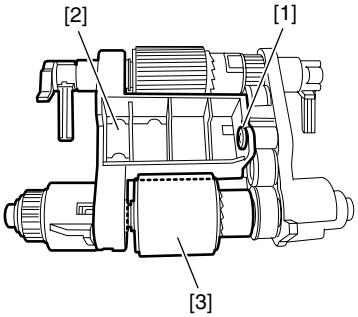
F-4-24

4.4.7 Feed Roller

4.4.7.1 Removing the Feed Roller

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

1) Remove the pickup/feed roller unit.
2) Remove the screw [1], and then remove the roller bracket [2].
3) Remove the feed roller [3].



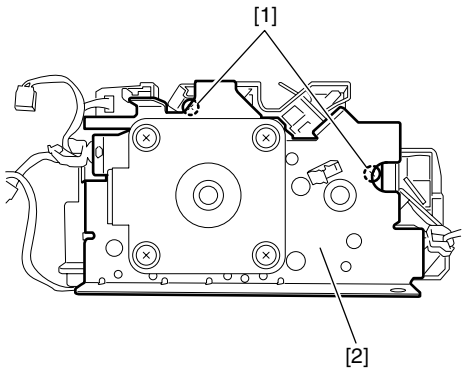
F-4-25

4.4.8 ADF Motor

4.4.8.1 Removing the ADF Motor

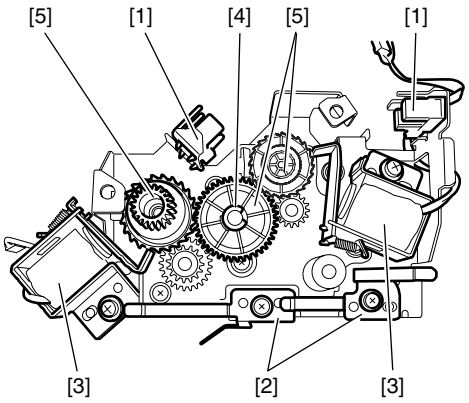
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

1) Remove the feed frame unit.
2) Remove the two screws [1], and then remove the drive unit [2].



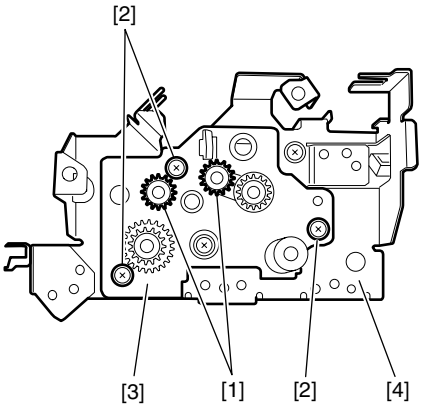
F-4-26

3) Remove the two sensors [1] (by releasing the claws), two leaf springs [2] (one screw each), two solenoids [3] (one screw each), one E-ring [4], and three gears [5].



F-4-27

4) Remove the two gears [1] and three screws [2], and then remove the bracket [3].
5) Remove the clamp from the motor frame. The remaining part is the ADF motor unit [4].



F-4-28

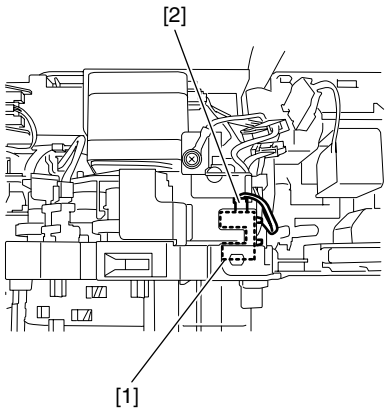
Since the ADF motor unit was factory-adjusted, do not disassemble it further.
After replacing the ADF motor unit, reinstall the parts removed in steps 3) and 4).

4.4.9 Document Set Sensor

4.4.9.1 Removing the Document Set Sensor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

1) Remove the rear cover.
2) Remove the connector [1], release the hook, and then remove the document set sensor [2].



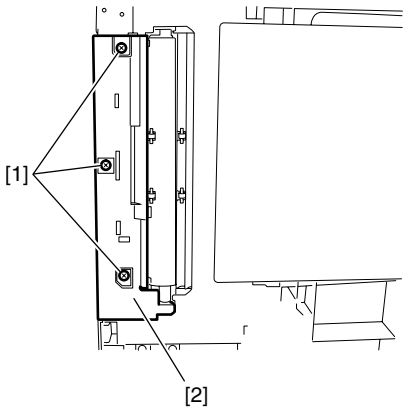
F-4-29

4.4.10 Document Edge Sensor

4.4.10.1 Removing the Original Placement Sensor

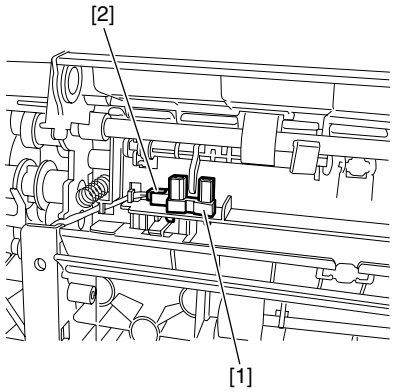
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the front cover and open/close cover.
2) Open the ADF, remove the three screws [1], and then detach the ADF left lower cover [2].



F-4-30

3) Release the claw to remove the original placement sensor [1], and then disconnect the connector [2].



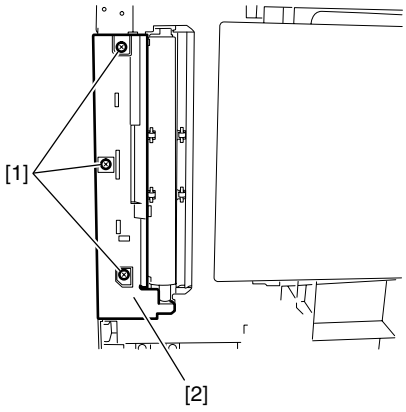
F-4-31

4.4.11 Registration Sensor

4.4.11.1 Removing the Registration Sensor

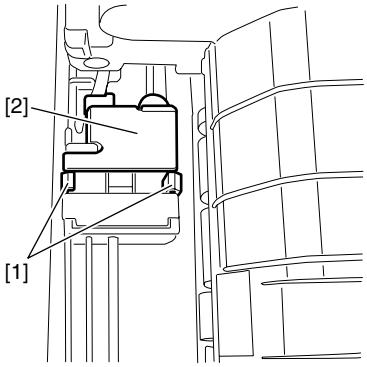
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the front cover and open/close cover.
2) Open the ADF, remove the three screws [1], and then detach the ADF left lower cover [2].



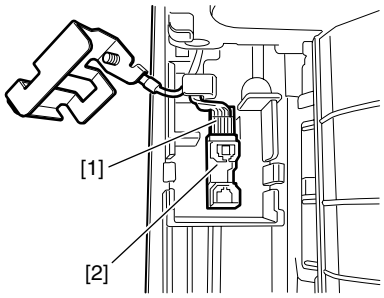
F-4-32

3) Release the two claws [1], and then remove the grounding plate [2].



F-4-33

4) Disconnect the connector [1], release the hook, and then remove the registration sensor [2].



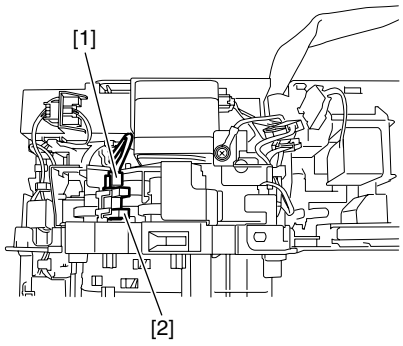
F-4-34

4.4.12 Separation Sensor

4.4.12.1 Removing the Separated Paper Sensor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Release the hook, remove the separated paper sensor [1], and then disconnect the connector [2].



F-4-35

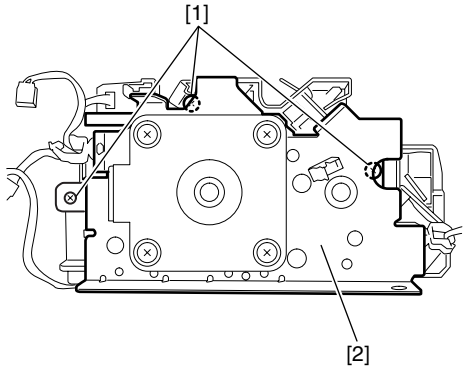
4.4.13 Pick-up Solenoid

4.4.13.1 Removing the Pickup Solenoid

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

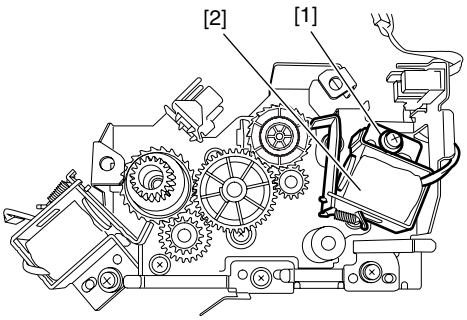
1) Remove the feed frame unit.
2) Remove the three screws [1], and then remove the drive unit [2].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



F-4-36

3) Remove the screw [1], and then remove the pickup solenoid [2].



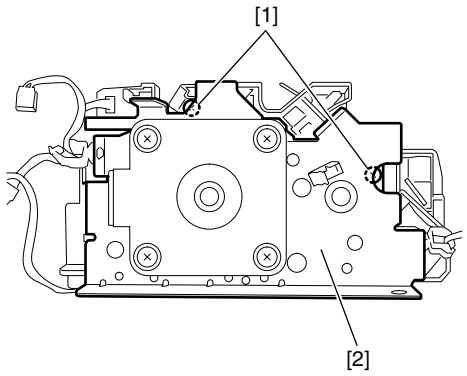
F-4-37

4.4.14 Registration Solenoid

4.4.14.1 Removing the Registration Solenoid

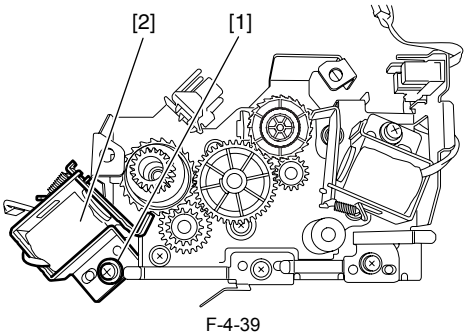
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the feed frame unit.
2) Remove the three screws [1], and then remove the drive unit [2].



F-4-38

3) Remove the screw [1], and then remove the pickup solenoid [2].



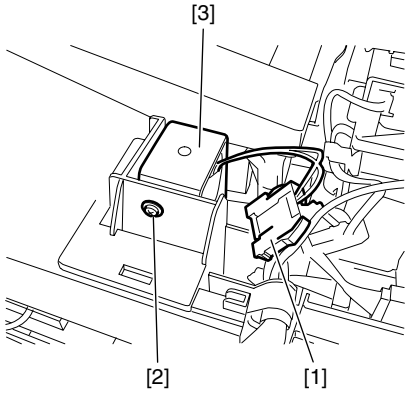
F-4-39

4.4.15 Release Solenoid

4.4.15.1 Removing the Release Solenoid

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Remove one connector [1] and one screw [2], and then remove the release solenoid [3].



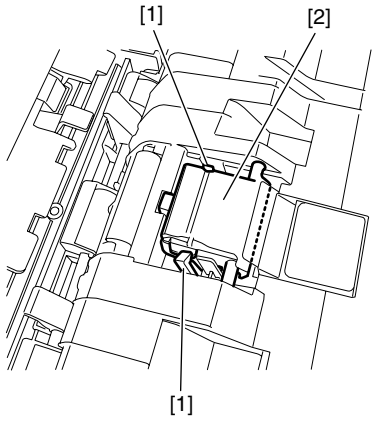
F-4-40

4.4.16 Separation Pad

4.4.16.1 Removing the Separation Pad

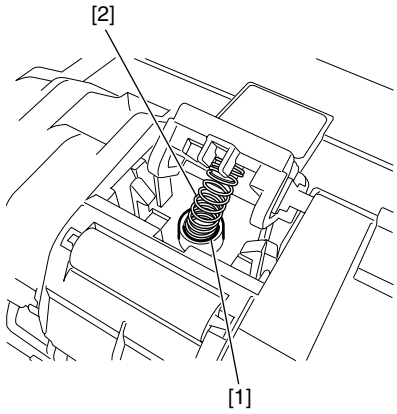
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Open the open/close cover.
2) Release the two claws [1], and then remove the separation pad [2].



F-4-41

When reinstalling the separation pad, be sure to put the spring [2] in the groove [1].



F-4-42

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 5 Laser Exposure

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

5.1 Overview/Configuration 5-1
5.1.1 Specifications and Control Mechanism 5-1
5.1.2 Main Components 5-2
5.2 Parts Replacement Procedure 5-3
5.2.1 Laser/Scanner Unit 5-3
5.2.1.1 Removing the Laser Scanner Unit 5-3

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

5.1 Overview/Configuration

5.1.1 Specifications and Control Mechanism

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-5-1

Item	Description
Laser beam	
Number of laser beams	2 beams
Scanner Motor	
Type of motor	DC brushless motor
Rotation control	Constant speed rotaion control
Polygon Mirror	
Number of facets	4 facets (20-mm dia.)
Control Mechanism	
Synchronous control	Horizontal (main scan) synchronization control
Light intensity control	Automatic photocurrent control (APC)
Others	Laser emission ON/OFF control
	Laser scanner motor control
	Laser shutter control

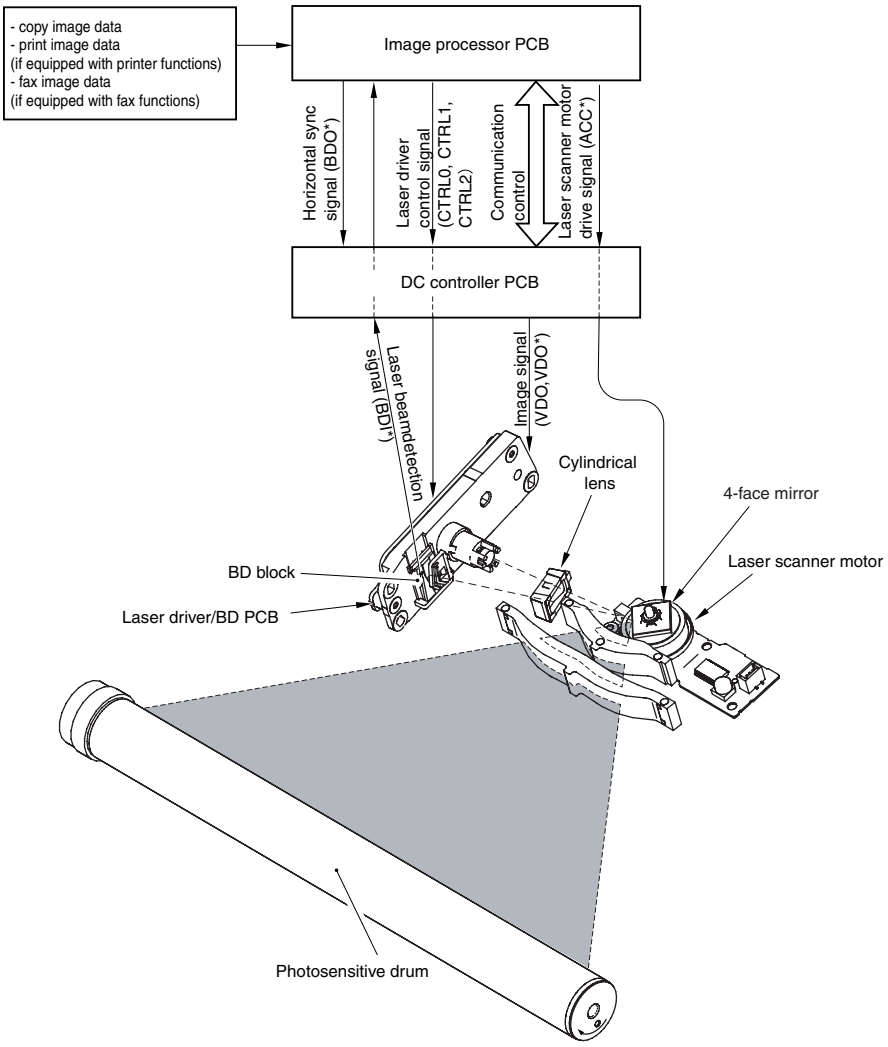
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

5.1.2 Main Components

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The laser scanner unit consists of the following major components:
- laser unit, which serves as the source of laser beam.
- laser scanner motor, equipped with a 4-face mirror for laser scanning.
- laser driver/BD PCB used to detect laser beam or to control emission of laser beam.

The laser beam generated by the laser unit based on the signals from the DC controller PCB moves through the collimator lens (inside the laser unit) and the cylindrical lens to reach a 4-face polygon mirror rotating at a constant speed.
When reflected by the 4-face polygon mirror, the laser beam moves through the imaging lens, and is bent by the reflecting mirror to reach the photosensitive drum. At this time, the laser beam also is directed to the BD circuit of the laser driver/BD PCB.
As the 4-face polygon mirror rotates at a constant speed, the laser beam scans the surface of the photosensitive drum at a constant speed, thereby removing charges and forming static images.



F-5-1

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

5.2 Parts Replacement Procedure

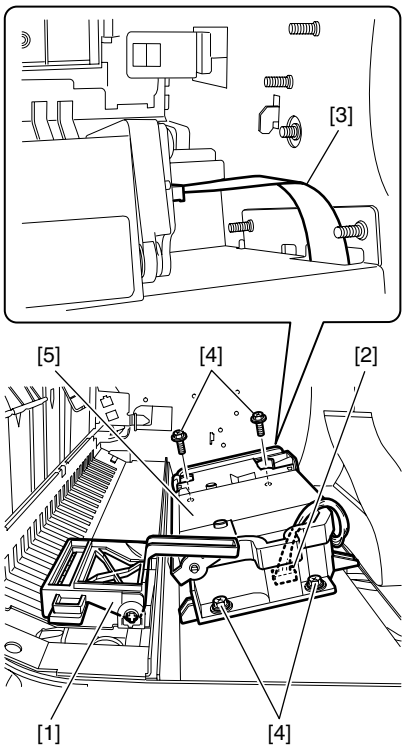
5.2.1 Laser/Scanner Unit

5.2.1.1 Removing the Laser Scanner Unit

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

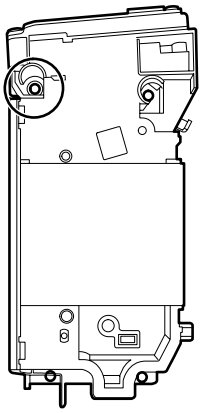
The laser scanner was-factory adjusted. Never disassemble it.

1) Detach the right cover, inner cover, delivery tray front cover, control panel, and delivery tray.
2) Remove the laser shutter [1].
3) Disconnect the connector [2] and flexible cable [3].
4) Remove the four screws [4] using a stubby screwdriver, and then remove the laser scanner unit [5].



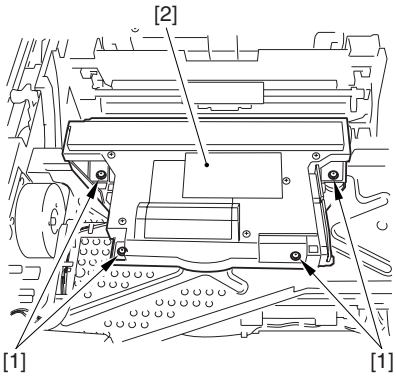
F-5-2

MEMO:
When reinstalling the laser scanner unit, it is difficult to install the encircled screw if your stubby screw driver is not magnetized. In this case, first install the screw in the screw hole on the laser scanner unit, place the laser scanner unit in place, and then tighten the screw tightly.



F-5-3

4) Remove the four screws [1] using a stubby screwdriver, and then remove the laser scanner unit [2].



F-5-4

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 6 Image Formation

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

6.1 Overview/Configuration 6-1
6.1.1 Specifications and Control Mechanism 6-1
6.2 Image Formation Process 6-1
6.2.1 Reproduction Processes 6-1
6.3 Parts Replacement Procedure 6-3
6.3.1 Transfer Charging Roller 6-3
6.3.1.1 Removing the Transfer Charging Roller 6-3

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

6.1 Overview/Configuration

6.1.1 Specifications and Control Mechanism

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-6-1

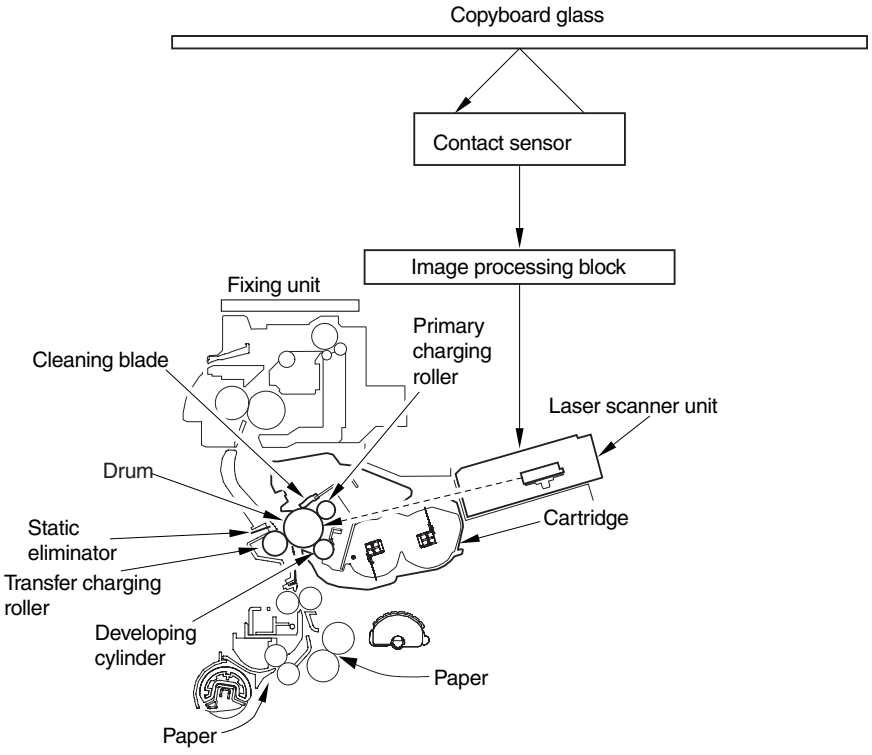
Items	Description
Photosensitive drum	
Drum type	OPC drum
Drum diameter	24mm
Cleaning mechanism	Cleaning blade
Processing speed	132.9mm/sec
Primary charging	
Charging method	Roller charging (AC + DC)
ng roller diameter	12mm
Transfer charging	
Charging method	Roller charging (DC)
Charging roller diameter	14.8mm
Developing assembly	
Developing cylinder diameter	20\\12mm
Developing method	Dry, 1-component jumping (AC + DC)
Toner	1-component, negative toner
Remaining toner level detection	Remaining toner level sensor (in toner cartridge)
Others	
Separation method	Static Eliminator + Curvature separation
Waste toner	Collected in the toner cartridge.

6.2 Image Formation Process

6.2.1 Reproduction Processes

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

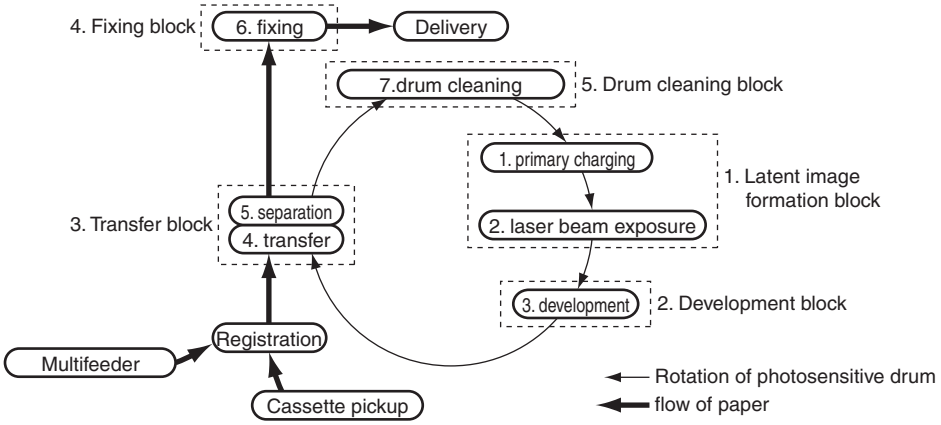
The machine uses an indirect electrostatic method, and is constructed as shown below



F-6-1

The machine is designed as a cartridge model, in which its drum, toner, primary charging assembly, developing assembly, and drum cleaner assembly are all constructed as a single entity.
The machine's image formation processes can be divided into the following 5 blocks (7steps):

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



F-6-2

[1] Latent Image Formation Block
Step 1 primary charging (AC + negative DC)
Step 2 laser beam exposure
[2] Developing Block
Step 3 development (AC + negative DC bias)
[3] Transfer Block
Step 4 transfer (positive DC)
Step 5 separation (grounding)
[4] Fixing Block
Step 6 fixing
[5] Drum Cleaning Block
Step 7 drum cleaning

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

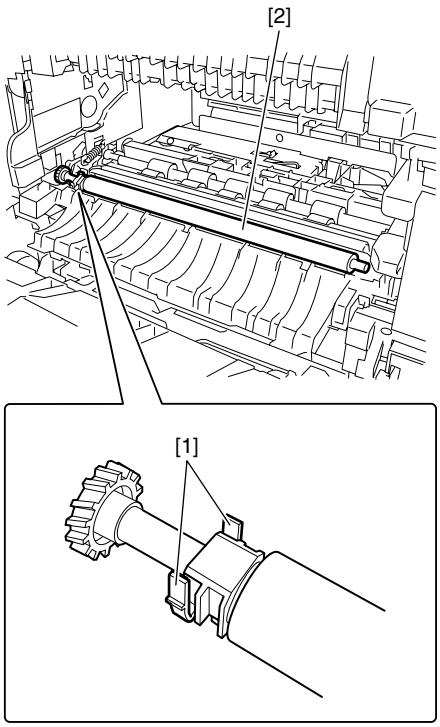
6.3 Parts Replacement Procedure

6.3.1 Transfer Charging Roller

6.3.1.1 Removing the Transfer Charging Roller

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the cartridge.
2) Release the two hooks [1], and then remove the transfer charging roller [2].



F-6-3

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 7 Pickup and Feed System

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

7.1 Overview/Configuration 7-1
7.1.1 Outline 7-1
7.2 Detection Jams 7-2
7.2.1 Jam Detection Outline 7-2
7.2.1.1 Outline 7-2
7.2.1.2 Types of Jams 7-2
7.3 Cassette Pickup Unit 7-3
7.3.1 Outline 7-3
7.3.2 Retry Pickup 7-3
7.3.3 Detecting the Size of Paper 7-3
7.4 Duplex Unit 7-4
7.4.1 Outline 7-4
7.5 Manual Feed Pickup Unit 7-5
7.5.1 Outline 7-5
7.5.2 Retry Pickup 7-5
7.5.3 Detecting the Size of Paper 7-5
7.6 Parts Replacement Procedure 7-6
7.6.1 Cassette Pickup Roller 7-6
7.6.1.1 Removing the Cassette Pickup Roller 7-6
7.6.2 Cassette Separation Roller 7-6
7.6.2.1 Removing the Cassette Separation Roller 7-6
7.6.3 Cassette Paper Sensor 7-6
7.6.3.1 Removing the Cassette Paper Sensor 7-6
7.6.4 Cassette Pickup Solenoid 7-7
7.6.4.1 Removing the Cassette Pickup Solenoid 7-7
7.6.5 Paper Feed Roller 7-7
7.6.5.1 Removing the Cassete Feed Roller 7-7
7.6.6 Manual Pickup Roller 7-7
7.6.6.1 Removing the Manual Pickup Roller 7-7
7.6.7 Manual Pickup Sensor 7-8
7.6.7.1 Removing the Manual Tray Sensor 7-8
7.6.8 Manual Pickup Solenoid 7-8
7.6.8.1 Removing the Manual Pickup Solenoid 7-8
7.6.9 Manual Separation Roller 7-8
7.6.9.1 Removing the Manual Separation Pad 7-8
7.6.10 Registration Roller 7-8
7.6.10.1 Removing the Registration Roller 7-8
7.6.11 Registration Sensor 7-9
7.6.11.1 Removing the Registration Sensor 7-9
7.6.12 Duplex Pick-up Solenoid 7-10
7.6.12.1 Removing the Duplex Pickup Solenoid 7-10
7.6.13 Registration Clutch 7-10
7.6.13.1 Removing the Registration Clutch 7-10
7.6.14 Main Motor 7-10
7.6.14.1 Removing the Main Motor 7-10

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

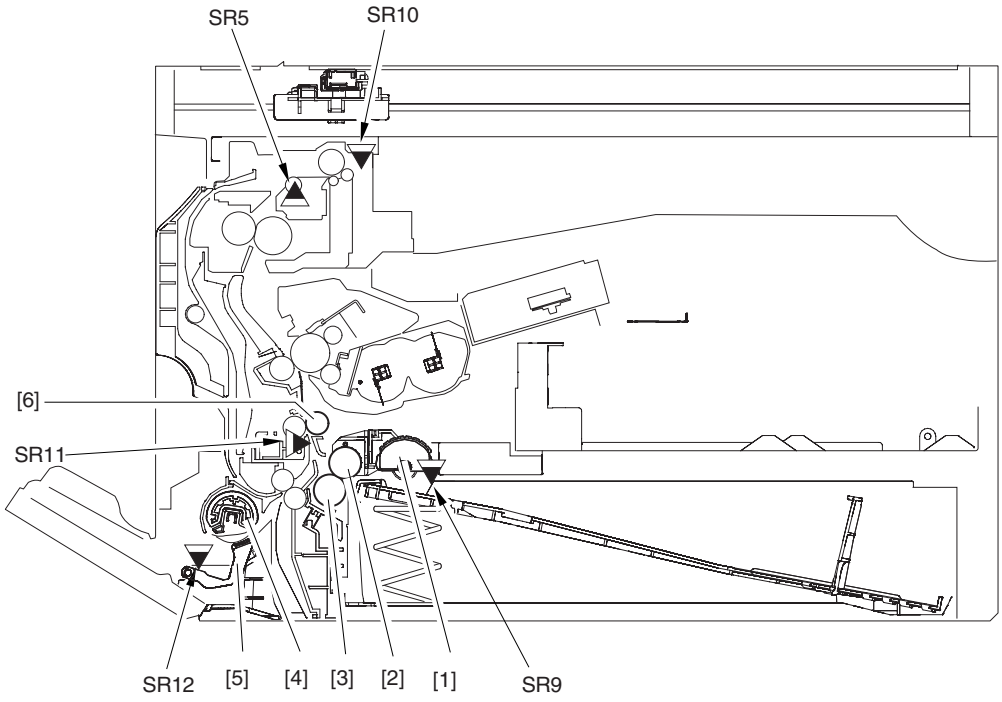
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

7.1 Overview/Configuration

7.1.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine is not equipped with a paper width detection mechanism. It uses center reference, in which paper moves centered through the pickup/feeding/delivery path. The source of paper may be from any of two: cassette and manual feed tray.
The paper is controlled so that its leading edge matches the leading edge of the image on the photosensitive drum by means of the registration sensor (SR11); it then is moved through the transfer, separation, feeding, and fixing assemblies to reach the delivery tray.
The machine is equipped with 5 sensors to monitor the movement of paper; the arrangement and of these sensors and rollers are as follows:



F-7-1
T-7-1

Symbol	Name
SR5	Delivery sensor
SR9	Cassette paper sensor
SR10	Delivery paper full sensor
SR11	Registration sensor
SR12	Multi feed paper sensor
[1]	Cassette pickup roller
[2]	Cassette feed roller
[3]	Cassette separation roller
[4]	Multi feed pickup roller
[5]	Multi feed separation pad
[6]	Registration roller

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

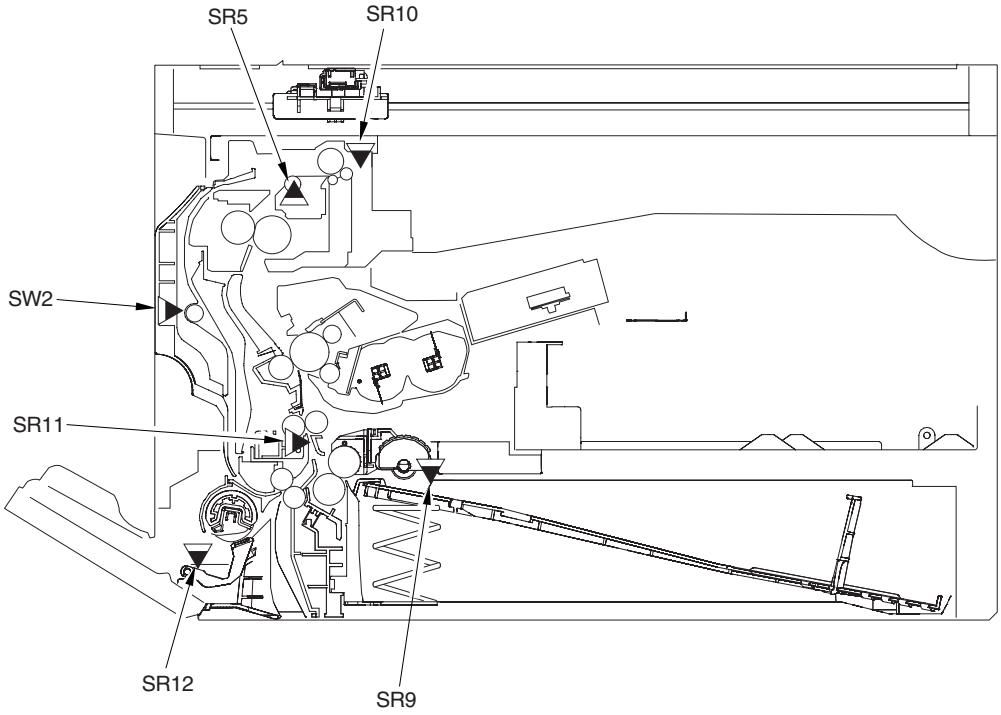
7.2 Detection Jams

7.2.1 Jam Detection Outline

7.2.1.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine is equipped with 3 jam sensors and 1 jam switch used to motor the movement of paper.
The presence/absence of paper or of a jam is checked at such times as programmed in advance in the CPU of the DC controller PCB and in relation to the presence/absence of paper over a specific sensor at a given time. If the machine detects a jam, it will turn off the main motor (M1), and will indicate a jam message in the control panel.



F-7-2
T-7-2

Symbol	Name
SR5	Delivey sensor
SR9	Cassette paper sensor
SR11	Registration sensor
SW2	Interlock switch

7.2.1.2 Types of Jams

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine groups jams into 7 types. When a jam occurs, be sure to remove it, and start over the operation.

Pickup Delay Jam
After execution of a pickup retry, the registration sensor (SR11) does not detect the leading edge of paper within a specific period of time. Or after the duplex drive solenoid (SL1) is on, the registration sensor (SR11) does not detect the leading edge of paper within a specific period of time.

Delivery Sensor Delay Jam
After the registration sensor (SR11) has detected the leading edge of paper, the delivery sensor (SR5) does not detect the leading edge of paper within a specific period of time.

Pickup Stationary Jam
After the registration sensor (SR11) has detected the leading edge of paper, the registration sensor (SR11) does not detect the trailing edge of paper within a specific period of time.

Delivery Sensor Stationary Jam
After the registration sensor (SR11) has detected the leading edge of paper, the delivery sensor (SR5) does not detect the trailing edge of paper within a specific period of time.

Wound Paper Jam at Fuser
The delivery sensor (SR5) has detected absence of paper within the prescribed time after it detected presence of paper.

Initial Jam
- ÉEÉFÉCÉgäJénéûÇ…ÅAÉåÉWÉXÉgÉZÉìÉT(SR11)ÅAîréÜÉZÉìÉT(SR5)ÇÃÇ¢Ç³ÇÍÇ©ÇÝópéÜóLÇËÇšåüímÇµÇ¾èÍçáÅB
- ÉEÉFÉCÉgíÜÇ…ÅAîréÜÉZÉìÉT(SR5)ÇÝópéÜóLÇËÇšåüímÇµÇ¾èÍçáÅB

Left door Open Jam
During paper feeding, the interlock switch (SW2) has detected OFF.

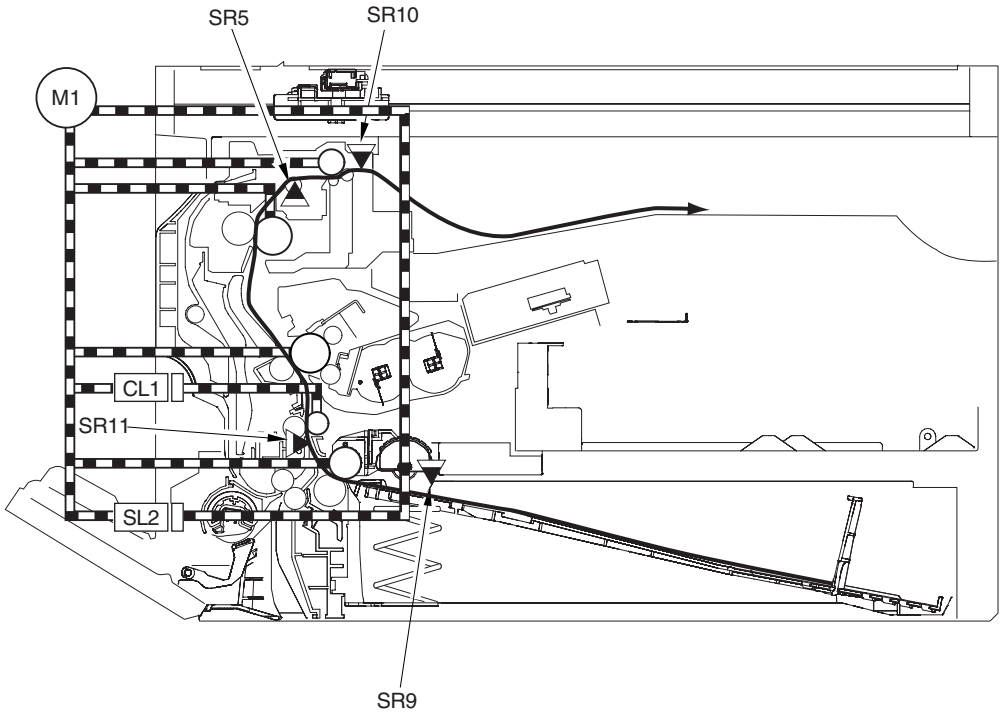
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

7.3 Cassette Pickup Unit

7.3.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Paper is picked up from the cassette under the control of the CPU on the DC controller PCB and using the drive of the main motor (M1). When the cassette pickup solenoid (SL2) goes ON, the drive of the main motor (M1) is transmitted to the cassette pickup roller assembly
to rotate the cassette pickup roller.
When the cassette pickup roller rotates, a single sheet of paper is separated from the stack by the separation claws of the cassette, and is sent as far as the registration roller by way of the feed roller.
After the paper passes a registration sensor (SR11), the paper reaches the registration roller. At this time the registration roller is at rest, causing the leading edge of the paper to butt against it to form an arch.
The DC controller PCB turns on the registration clutch (CL1) at specific timing to transmit the drive of the main motor to the registration roller, thereby moving the paper ahead. The paper reaches the delivery tray after moving through the transfer, separation, and fixing/delivery assemblies.
îréÜÉgÉåÉCè„Ç…ÇÒÁAîréÜÇŠÇÍÇ¾ópéÜÇÃñûçÇšâüímÇ²ÇEÇ¾Ç?ÇÃîréÜñûçâüímÉZÉiÉTÅiSR10ÅjÇšî€Ç¶ÇƒÇ¢ÇÈÅB
îrèoÇŠÇÍÇ¾ópéÜåŽÇ™ãKíÊílà»è„ÇýÇ»ÇÊîréÜñûçâüímÉZÉiÉTÅiSR10ÅjÇ™ONÇµÇ¾èÍçáÅAñ{ã@ÇÒÁAÉGÉåÅ[Çýî"ífÇµÅALCDÇ…ÉGÉåÅ[ÉÅÉbÉZÅ[ÉWÇšï\é¶Ç²ÇÈÅB



F-7-3

7.3.2 Retry Pickup

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

If the registration sensor (SR11) does not detect paper within a specific period of time after the cassette pickup roller has started to rotate, the machine will start to rotate the cassette pickup roller once again to execute a retry pickup operation.
If the registration sensor (PS102) still does not detect paper within a specific period of time after the machine executes a retry pickup operation once, the machine will identify the condition as a jam and will indicate a jam message on the LCD of its control panel.

7.3.3 Detecting the Size of Paper

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The cassette paper size detection is performed using the registration sensor (PS102) based on the length of paper. In fax mode, if paper of a size different from the size selected from the control panel is placed, the DC controller will identify a paper size mismatch at the end of printing and indicate a message on the LCD.

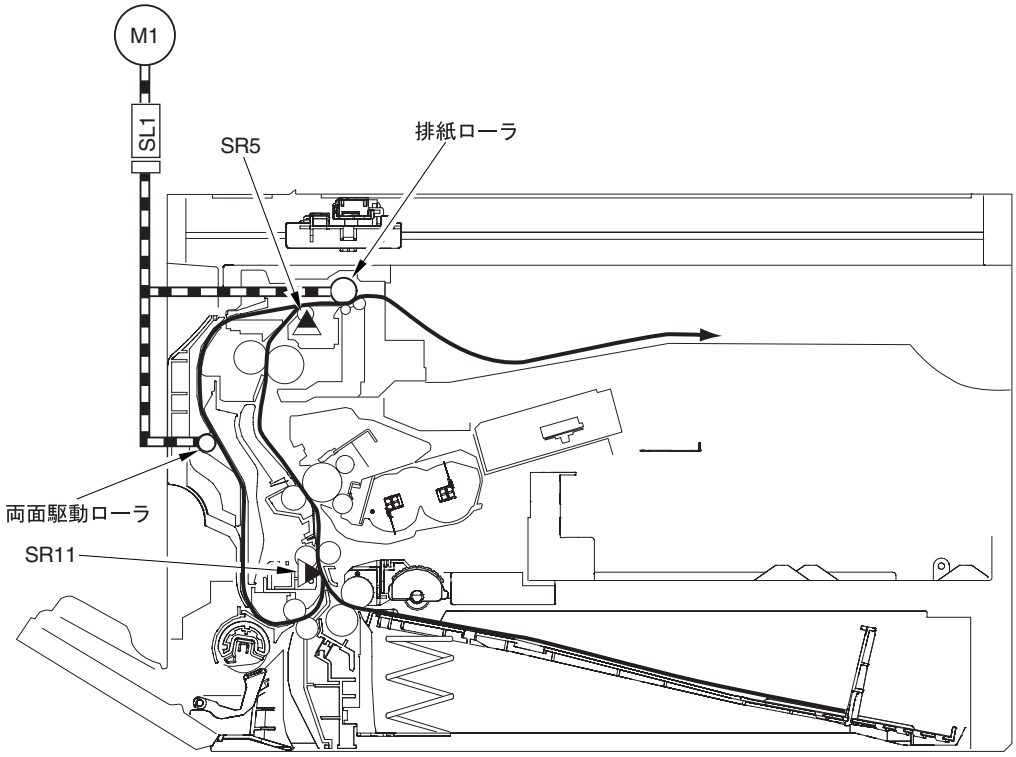
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

7.4 Duplex Unit

7.4.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

ñ{ã@ÇÃóºñþãäéÜìÆçÏÇÕÅADCÉRÉìÉgÉçÅ[ÉââÒòHäÓî¬ÇÃCPUêßå‰ÇÃÇ‡ÇýÅAÉÅÉÇÉìÉÇÅ[É^(M1)ÇÃäÏìÆÇ…ÇÊÇ¡ÇƒçsÇ»ÇÌÇÍÇÈÅBï\ñþÇÃÉvÉäÉìÉgÇ™èIÇÌÇËóþéÜÇÅå„í[Ç™îréÜÉZÉìÉT(SR5)ÇšîðÇØÇƒ10mmâ?Ç¯ÇÈÇýÅAóºñþãÏìÆÉ\ÉåÉmÉCÉh(SL1)Ç™ONÇµÅAÉÅÉCÉìÉÇÅ[É^ÅìM1ÅjÇÃäÏìÆÇ™îréÜÉçÅ[ÉâÇ®ÇÊÇ—
óºñþî¿ëóÉçÅ[ÉâÇ…ì`íBÇŠÇÍÇÈÅBóþéÜÇÕÅAîréÜÉçÅ[ÉâÇ™ãtâÒì]ÇµÇƒóºñþÉÜÉjÉbÉgÇ…óUì±ÇŠÇÍÅAóºñþî¿ëóÉçÅ[ÉâÇšåoóRÇµÇƒÅAÉåÉWÉXÉgÉçÅ[ÉâÇ‹ÇÝëóÇÀÇÍÇÈÅB
óºñþóþéÜî¿ëóòHÇ…ÇÕÅAóþéÜÇÃìûíBÇ†ÇÈÇ¢ÇÕíþâ?ÇšâüímÇ²ÇÈÉZÉìÉTÇÕÇ»Ç¢ÅB
óºñþÉÜÉjÉbÉgÇÝÇÃóþéÜÇšàÍíUí¸é~ÇµÅAï¤éùÇµÇƒÇ®Ç¦ëÿóØã@î\ÇÕÇ»Ç¢ÅB
óºñþÉvÉäÉìÉgéúÇÃàÜç¸èáèòÇÕÅAóºñþ2ñáâ¥çeÉRÉsÅ[ÇÀèÍçáÅAÉÅÉÇÉäã@î\Ç…ÇÊÇË1ñþñ‰†ñþÅA1ñþñ‰\ñþÅA2ñþñ‰†ñþÅA2ñþñ‰\ñþÇÃèáÇ…àÛç¸ÇŠÇÍÇÈÅB



F-7-4

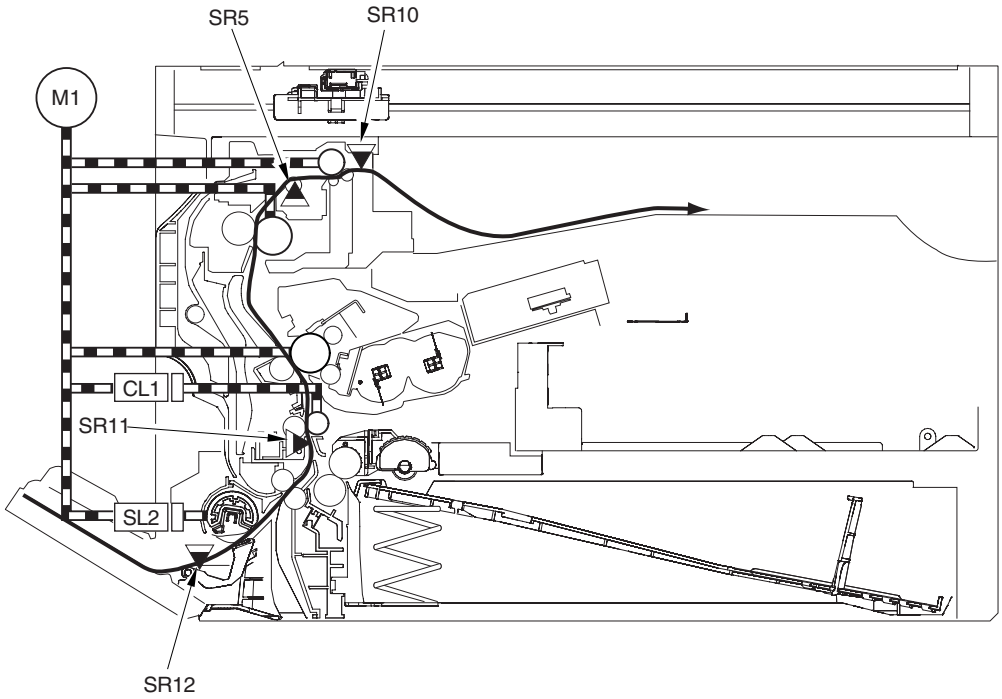
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

7.5 Manual Feed Pickup Unit

7.5.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Paper is picked up from the manual feed tray under the control of the CPU on the DC controller PCB and using the drive of the main motor (M1). When the manual feed pickup solenoid (SL5) goes ON, the drive of the main motor (M1) is transmitted as far as the
manual feed pickup roller assembly to rotate the manual feed pickup roller.
The sheets of paper stacked in the manual feed tray are lifted by the work of a spring and forced against the manual feed pickup roller. Thereafter, a single sheet of paper is separated by the work of the manual feed pickup roller and the separation pad, and is moved as far as the registration roller.
After the paper passes a registration sensor (SR11), the paper reaches the registration roller. At this time the registration roller is at rest, causing the leading edge of the paper to butt against it to form an arch.
The DC controller PCB turns on the registration clutch (CL1) at specific timing to transmit the drive of the main motor to the registration roller, thereby moving the paper ahead. The paper reaches the delivery tray after moving through the transfer, separation, and fixing/delivery assemblies.
îréÚÉgÉåÉCè„Ç…ÇÒÁAîréÜÇŠÇÍÇ¾ópéÜÇÃñûçÇšâüímÇ²ÇEÇ¾Ç?ÇÃîréÜñûçâüímÉZÉiÉTÅiSR10ÅjÇšî€Ç¶ÇƒÇ¢ÇÈÅB
îrèoÇŠÇÍÇ¾ópéÜåŽÇ™ãKíÊílà»è„ÇýÇ»ÇÊîréÜñûçâüímÉZÉiÉTÅiSR10ÅjÇ™ONÇµÇ¾èÍçáÅAñ{ã@ÇÒÁAÉGÉåÅ[Çýî"ífÇµÅALCDÇ…ÉGÉåÅ[ÉÅÉbÉZÅ[ÉWÇšï\é¶Ç²ÇÈÅB



F-7-5

7.5.2 Retry Pickup

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

If the registration sensor (SR11) does not detect paper within a specific period of time after the manual feed pickup roller starts to rotate, the machine will rotate the manual feed pickup roller once again to execute a retry pickup operation. If the registration sensor (SR11) still does not detect the leading edge of paper after the machine executes a retry pickup operation once, the machine will identify the condition as a jam and will indicate a jam message on the LCD in its control panel.

7.5.3 Detecting the Size of Paper

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The size of paper in the manual feed tray is detected using the registration sensor (SR11) with reference to the length of paper. In fax mode, if paper of a size different from the size selected from the control panel is placed, the DC controller will identify a paper size
mismatch at the end of printing and indicate a message on the LCD.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

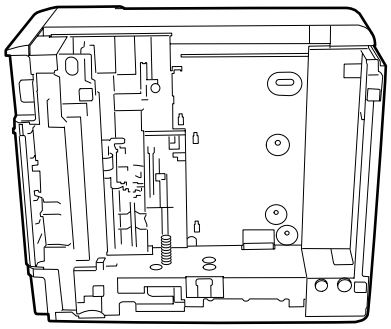
7.6 Parts Replacement Procedure

7.6.1 Cassette Pickup Roller

7.6.1.1 Removing the Cassette Pickup Roller

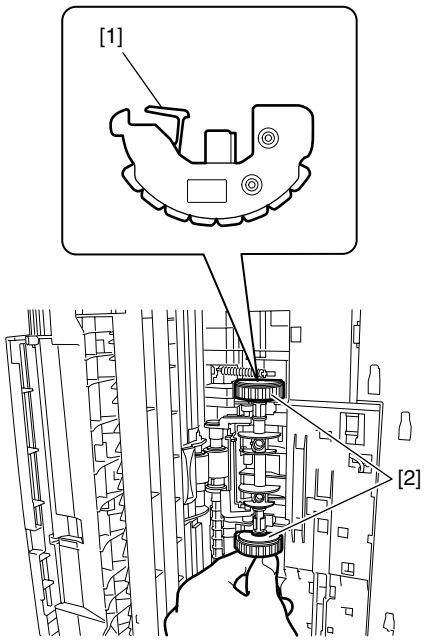
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the cassette.
2) Place the machine with the rear panel down. However, since the exhaust duct projects about 16 mm from other area of the rear panel, insert stacks of paper or the like under the rear panel so that the machine stands stably.



F-7-6

3) Turn the pickup roller a half-turn with one hand, release the hook [1] with the other hand, and remove the cassette pickup roller [2].



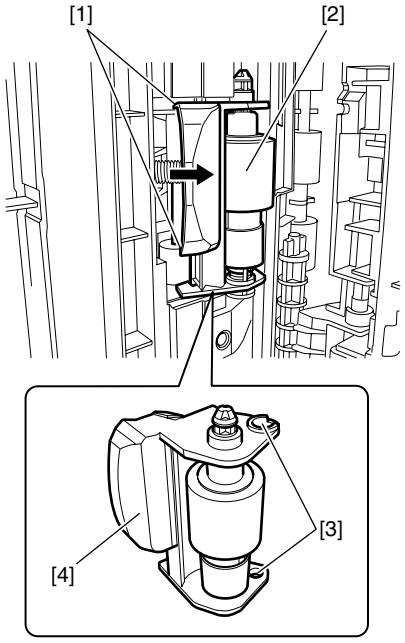
F-7-7

7.6.2 Cassette Separation Roller

7.6.2.1 Removing the Cassette Separation Roller

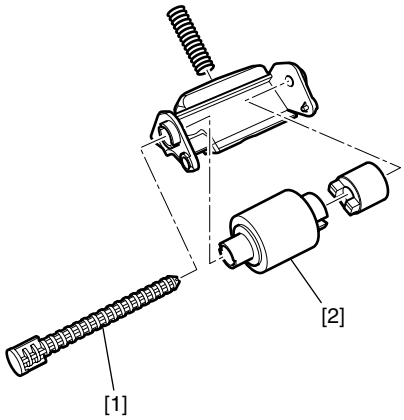
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the cassette.
2) Place the machine with the rear panel down. However, since the exhaust duct projects about 16 mm from other area of the rear panel, insert stacks of paper or the like under the rear panel so that the machine stands stably.
3) Remove the feed roller.
4) Remove the claw [1], and pull out the separation roller assembly [2].
5) Remove the shaft [3] from the shaft hole to remove the separation roller assembly [4].



F-7-8

6) Remove the shaft [1], and remove the separation roller [2].



F-7-9

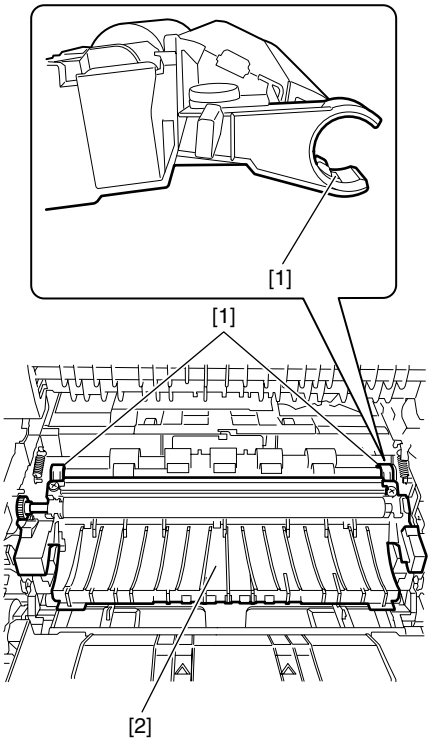
7.6.3 Cassette Paper Sensor

7.6.3.1 Removing the Cassette Paper Sensor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

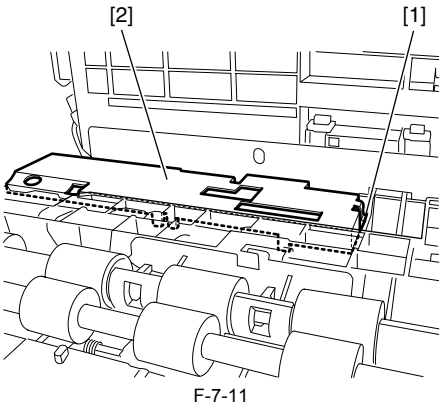
1) Remove the two shafts [1], and then remove the transfer guide [2].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



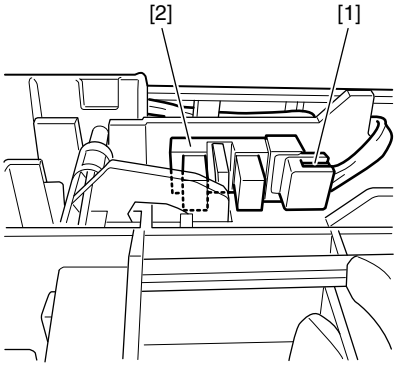
F-7-10

2) Release the claw [1], and then detach the sensor cover [2].



F-7-11

3) Disconnect the connector [1], release the claw, and then remove the cassette paper sensor [2].



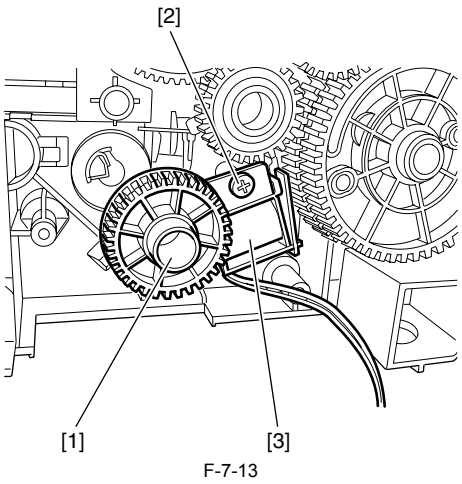
F-7-12

7.6.4 Cassette Pickup Solenoid

7.6.4.1 Removing the Cassette Pickup Solenoid

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover and rear-left cover.
2) Remove the relay PCB, registration clutch, and pickup drive unit.
3) Remove the gear [1] and screw [2], and then remove the pickup solenoid [3].



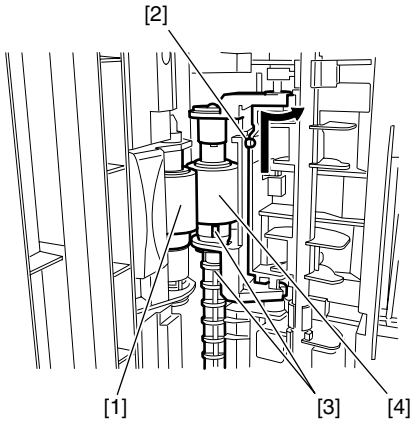
F-7-13

7.6.5 Paper Feed Roller

7.6.5.1 Removing the Cassete Feed Roller

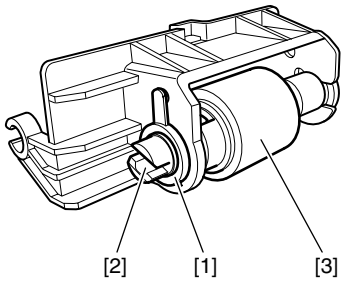
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the cassette.
2) Place the machine with the rear panel down. However, since the exhaust duct projects about 16 mm from other area of the rear panel, insert stacks of paper or the like under the rear panel so that the machine stands stably.
3) While pressing the separation roller [1] to release the pressure, remove the boss [2] and slide the feed roller upward until the shafts [3] are separated.
4) Pull out the feed roller [4] to remove it.



F-7-14

5) Remove the bushing [1] and shaft [2], and then remove the feed roller [3].



F-7-15

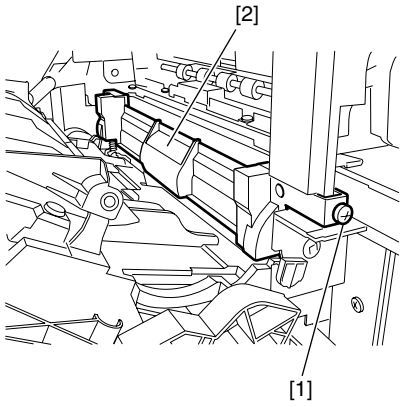
7.6.6 Manual Pickup Roller

7.6.6.1 Removing the Manual Pickup Roller

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

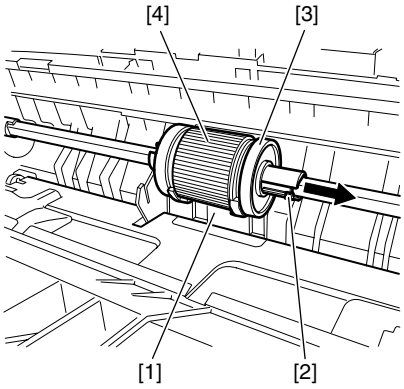
1) Detach the front cover and front-left cover.
2) Remove the screw [1], and then detach the roller cover [2].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



F-7-16

3) While holding the manual separation pad [1], release the right hook [2] and then slide the right bearing [3].
4) Remove the manual pickup roller [4].



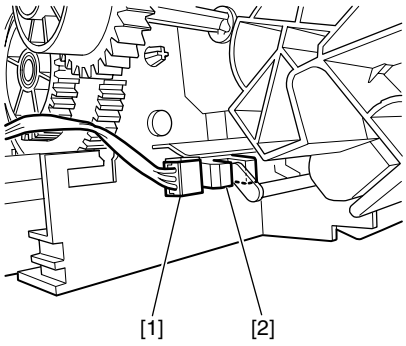
F-7-17

7.6.7 Manual Pickup Sensor

7.6.7.1 Removing the Manual Tray Sensor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the left cover and rear-left cover.
2) Remove the relay PCB, registration clutch, and pickup drive unit.
3) Disconnect the connector [1], release the claw, and then remove the manual tray sensor [2].



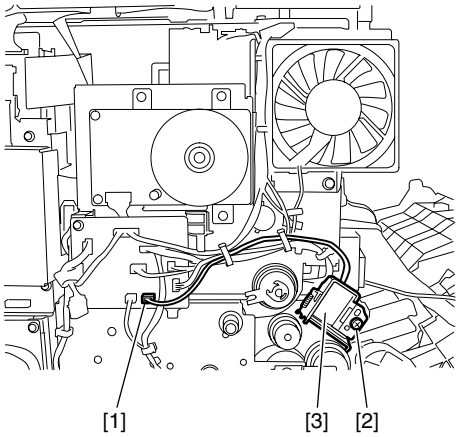
F-7-18

7.6.8 Manual Pickup Solenoid

7.6.8.1 Removing the Manual Pickup Solenoid

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the left cover and rear-left cover.
2) Disconnect the connector [1], remove the screw [2], and then remove the manual tray pickup solenoid [3].



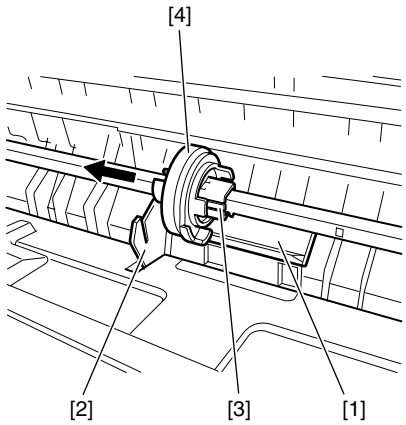
F-7-19

7.6.9 Manual Separation Roller

7.6.9.1 Removing the Manual Separation Pad

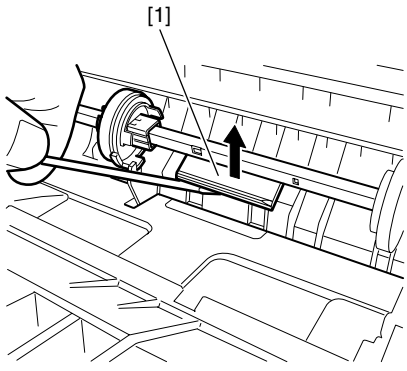
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the manual pickup roller.
2) While holding the manual separation pad [1], release the claw [3] and slide the left bearing [4] with attention paid to the sensor flag [2].



F-7-20

3) With the flathead screwdriver inserted as shown below, remove the manual pickup pad [1].



F-7-21

7.6.10 Registration Roller

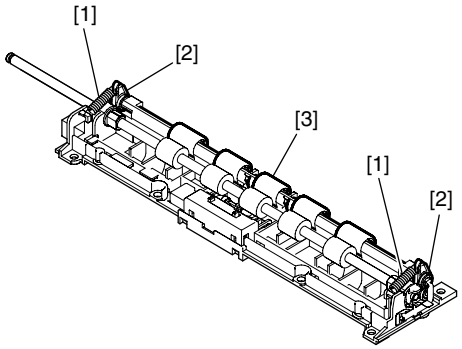
7.6.10.1 Removing the Registration Roller

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the rear cover and rear-left cover.
2) Remove the fun duct, main motor, relay PCB, registration clutch, pickup drive unit, and main drive unit.
3) Remove the transfer guide.
4) Remove the two springs [1].
5) Remove the two bearings [2], and then remove the right registration roller

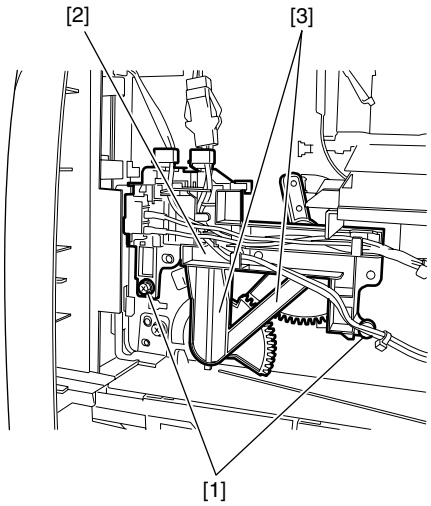
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

[3].



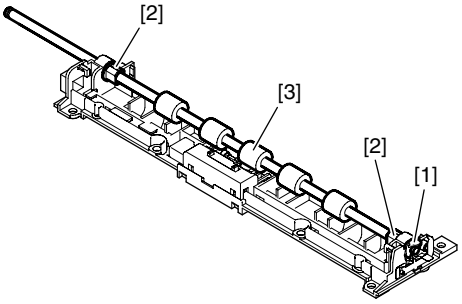
F-7-22

6) Remove the two screws [1] and move the guide [2] out of the way.
7) Remove the drum shutter lever 1/2 [3].



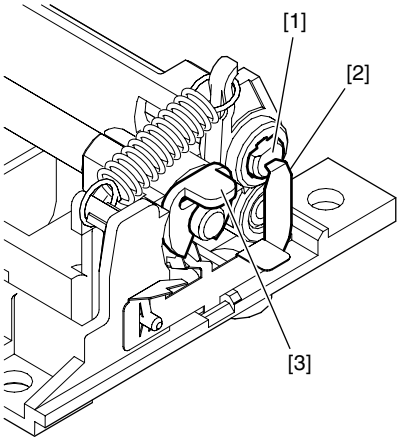
F-7-23

8) Remove one E-ring [1], two bearings [2], and left registration roller [3].



F-7-24

When reinstalling the right registration roller, the grounding spring [2] must be in touch with the end [1] of this roller. It is recommended to use tweezers when reinstalling the E-ring [3].



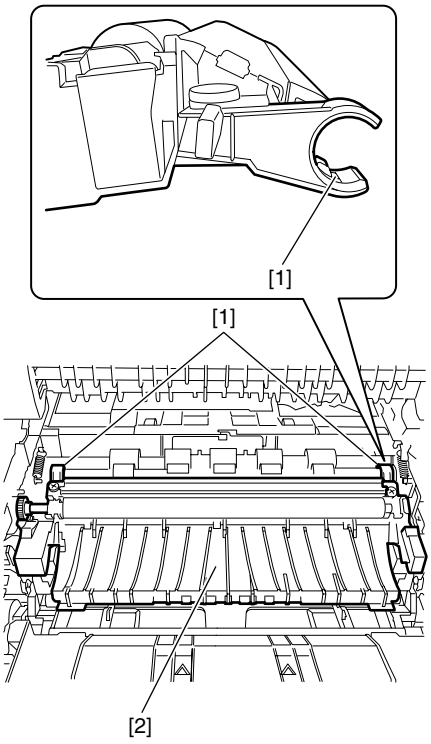
F-7-25

7.6.11 Registration Sensor

7.6.11.1 Removing the Registration Sensor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

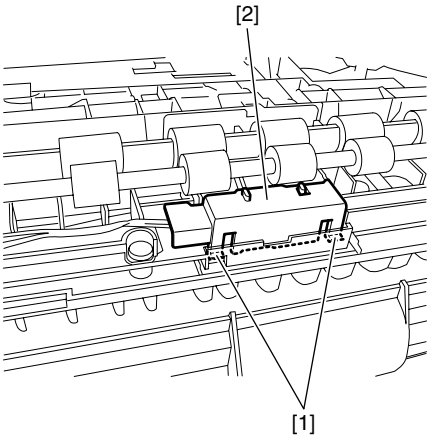
1) Remove the two shafts [1], and then remove the transfer guide [2].



F-7-26

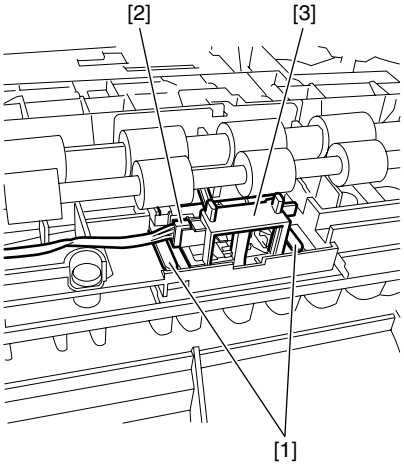
2) Release the two hooks [1], and then detach the registration sensor cover [2].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



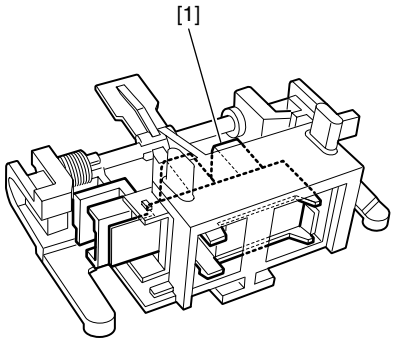
F-7-27

3) Remove the two bosses [1], disconnect the connector [2], and then slide the registration sensor unit [3] toward you to remove it.



F-7-28

4) Remove the registration sensor [1] by releasing the hook.



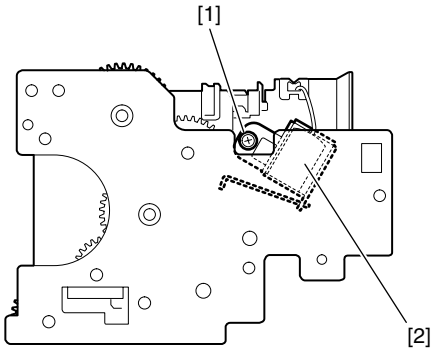
F-7-29

7.6.12 Duplex Pick-up Solenoid

7.6.12.1 Removing the Duplex Pickup Solenoid

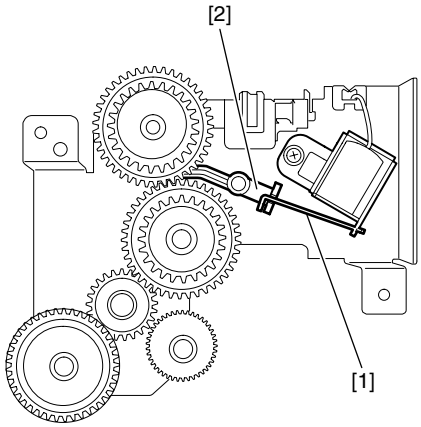
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the left cover and rear-right cover.
2) Remove the fan duct, main motor, relay PCB, registration clutch, pickup drive unit, main drive unit, and fixing/drive unit.
3) Remove the screw [1], and then remove the duplex pickup solenoid [2].



F-7-30

When installing the duplex pickup solenoid, be sure to install the solenoid lever [1] on the arm [2].



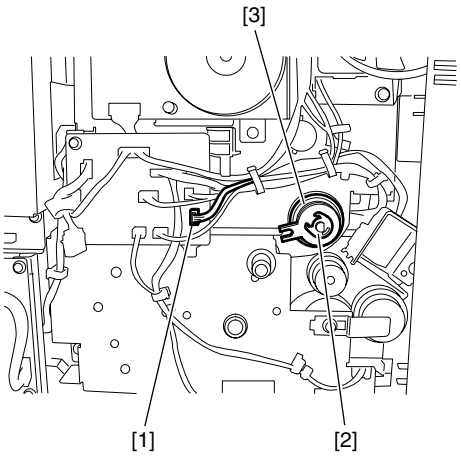
F-7-31

7.6.13 Registration Clutch

7.6.13.1 Removing the Registration Clutch

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Remove the connector [1] and E-ring [2], and then remove the registration clutch [3].



F-7-32

7.6.14 Main Motor

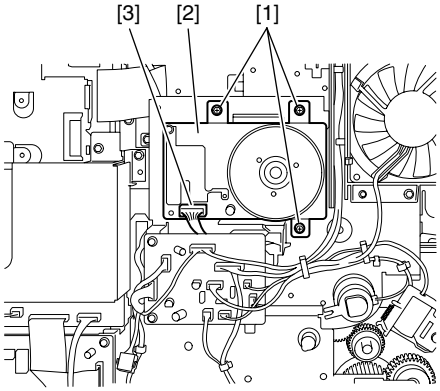
7.6.14.1 Removing the Main Motor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

2) Remove the three screws [1], and then remove the main motor [2].
3) Disconnect the connector [3].



F-7-33

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 8 Fixing System

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

8.1 Overview/Configuration 8-1
8.1.1 Specifications, Control Mechanisms, and Functions 8-1
8.1.2 Outline 8-1
8.2 Various Control Mechanisms 8-2
8.2.1 Controlling the Temperature of the Fixing Unit 8-2
8.2.1.1 Outline 8-2
8.2.2 Controlling the Fixing Film Temperature 8-2
8.2.2.1 Controlling the Fixing Film Temperature 8-2
8.2.2.2 Target Temperatures by Mode 8-2
8.3 Protection Function 8-3
8.3.1 Outline 8-3
8.3.2 Failure Detection 8-3
8.4 Parts Replacement Procedure 8-4
8.4.1 Fixing Unit 8-4
8.4.1.1 Removing the Fixing Unit 8-4
8.4.2 Fixing Film Unit 8-5
8.4.2.1 Removing the Fixing Film Unit 8-5
8.4.3 Fixing Pressure Roller 8-6
8.4.3.1 Removing the Pressure Roller 8-6
8.4.4 Fixing Delivery Paper Sensor 8-7
8.4.4.1 Removing the Delivery Sensor 8-7
8.4.5 Delivery Full Sensor 8-7
8.4.5.1 Removing the Delivery Full Sensor 8-7

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

8.1 Overview/Configuration

8.1.1 Specifications, Control Mechanisms, and Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

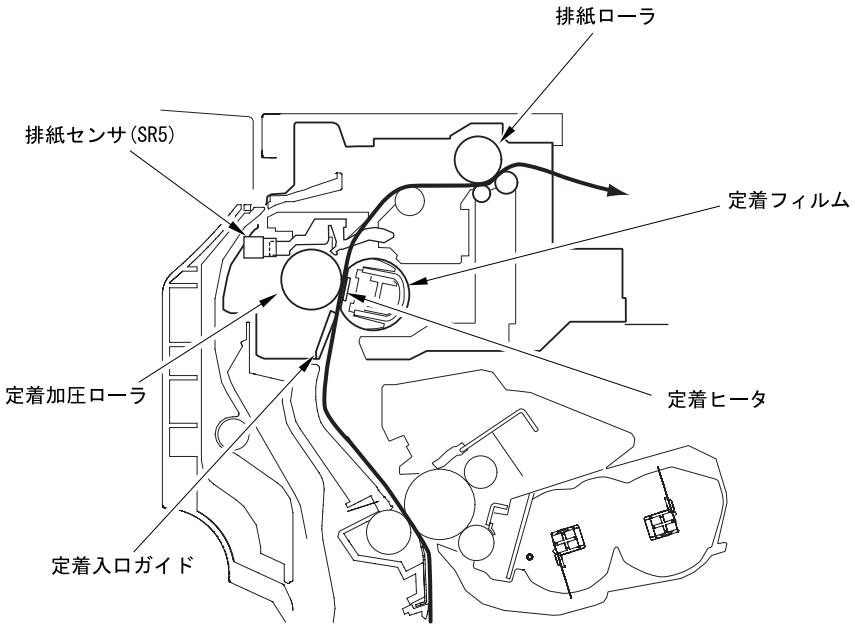
T-8-1

Item	Function/Method
Fixing method	by fixing film + pressure roller
Fixing heater	Unitary flat heater incorporating both main heater and sub heater
Fixing temperature detection	[1] Main thermistor (TH1): Temperature control and fault detection
	[2] Sub thermistor (TH2): Fault detection
	[3] Thermo-switch (TP1): Fault detection
Fixing temperature control	[1] Warm-up temperature control
	[2] Normal temperature control
	[3] Sheet-to-sheet temperature control
Protection functions	[1] Detection of error in temperature control by thermistor
	[2] Detection of temperature rise by thermo-switch

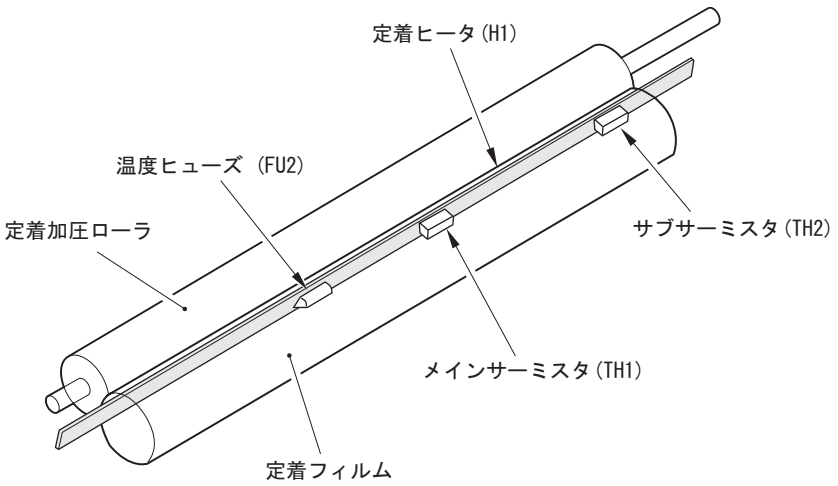
8.1.2 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

íËíÖÉÜÉjÉbÉgÇÕÅAÉIÉìÉfÉ}ÉìÉhíËíÖï°éÆÇšçÃópÇuÇƒÇ®ÇËÅAíËíÖÉqÅ[É^ÅAÉTÅ[É~ÉXÉ^ÅAÉTÅ[ÉÇÉXÉCÉbÉ`Ç™ëgÇ›çûÇ‹ÇÍÇƒÇ¢ÇÈíËíÖÉtÉBÉãÉÄÉÜÉjÉbÉgÇÝâ¡àŠÉçÅ[ÉâÅAîréÜÉçÅ[ÉâÇ…ÇÈÇÈç\ê¨ÇŠÇÍÇƒÇ¢ÇÈÅB
The fixing pressure roller and the delivery roller are driven by the main motor (M1). The paper separated from the photosensitive drum is moved to the inside of the fixing assembly; the paper is then moved outside it after the toner is fused to the paper by the work
of the fixing film and the fixing pressure roller.
The delivery sensor (SR5) is used to detect paper coming out of the fixing assembly.



F-8-1



F-8-2

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

8.2 Various Control Mechanisms

8.2.1 Controlling the Temperature of the Fixing Unit

8.2.1.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The fixing film unit has a plate-shaped fixing heater built into it for heating the fixing film.
The fixing heater is equipped with 2 thermistor: a main thermistor in the middle and a sub thermistor at the end. The main thermistor is used to control the temperature of the fixing heater and to detect its overheating, while the sub thermistor is used to detect an error temperature on the end of the fixing heater.
The CPU on the DC controller PCB monitors the main thermistor signal (FSRTH) and the sub thermistor signal (SUBTH) from the thermistors for control of the fixing heater drive signal (FSRD0) and the relay drive signal (RLYD), thus varying the supply of power to the heater and, ultimately, controlling the temperature of the fixing heater.

8.2.2 Controlling the Fixing Film Temperature

8.2.2.1 Controlling the Fixing Film Temperature

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The CPU on the DC controller PCB executes the following 6 types of fixing temperature control:

1.óßÇøè„Ç×â²ìxêßå‰
ÉCÉÀÅ[ÉWÉvÉçÉZÉbÉTâÒòHäÓî¬Ç©ÇÁÉvÉäÉìÉgéwé¶ÉRÉ}ÉìÉhÇ™ì¸óÕÇŠÇÍÇƒÇ©ÇÁÅÀíÉíÖâ²íðÉÇÅ[ÉhÇ®ÇÊÇ—
ëOâÒÉvÉäÉìÉgñáêîÇ…âûÇ'ÇƒíÉíÖÉqÅ[É^ÇšíþéÜâ²íðñ΍Wâ²ìxÇÊÇËí·Ç¢â²ìxÇ‹ÇÝóßÇøè„Ç×ÇÈÅB

2.Paper-present section temperature control
The fixing heater temperature is adjusted to the target paper-present section temperature according to the combination of the paper size, number of sheets fed, fixing mode, and temperature detected by the fixing main thermistor.

3.Sheet-to-sheet temperature control
The fixing heater temperature is held relatively below the target paper-present section temperature to prevent the paper-absent section temperature from rising between sheets.

4.óºñþéÜä‘ñ΍Wâ²ìx
ó°ñþéÜä‘éûÇ…îÒíþéÜïîÇÃè³â²Ç§ñhÇÆÇ¾Ç?ÅÀíÉíÖÉqÅ[É^ÇÃâ²ìxÇšà»â½ÇÃÇÊÇ§Ç…êßå‰Ç²ÇÈÅB
ÉvÉäÉìÉgñáêîÇ™1Å`3ñáñÇÕÅÀíþéÜâ²íðñ΍Wâ²ìxÇ©ÇÁ25Åéâ½Ç×ÇÈÅB
4ñáñâ»ç~ÇÕÅÀíþéÜâ²íðñ΍Wâ²ìxÇ©ÇÁ35Åéâ½Ç×ÇÈÅB

5.É_ÉEÉìÉVÅ[ÉPÉìÉX
òÀë±ÉvÉäÉìÉgéûÇÕÅÀîÒíþéÜïîÇÃÉTÉuÉTÅ[É~ÉXÉ^Ç™àŸèÌçÇâ²Ç…Ç»ÇÈã×ÇÍÇ™Ç†ÇÈÇ¾Ç?ÅÀÉTÉuÉTÅ[É~ÉXÉ^âüímâ²ìxÇ™250/255/260Åéà»è„Çšâüím²ÇÈÇýéÜä‘ÇšçLÇ×ÅÀîÒíþéÜïîÇÃè³â²Çšñhé~Ç²ÇÈÇÊÇ§Ç…êßå‰Ç²ÇÈÅBâüímâ²ìxÇ…ÇÊÇ¡Çƒ3íiäKÇÃÉ_ÉEÉìÉVÅ[ÉPÉìÉXÇšçsÇ§ÅBÉ_ÉEÉìÉVÅ[ÉPÉìÉXíÜÇ…ÉTÉuÉTÅ[É~ÉXÉ^âüímâ²ìxÇ™180Åéà»â½Çšâüím²ÇÈÇýíþèÌêßå‰Ç…ñ?ÇÈÅB

éQçlÅF
É_ÉEÉìÉVÅ[ÉPÉìÉXéûÇÃA4/LTRÇÃÉXÉãÅ[ÉvÉvÉbÉgÇšà»â½Ç…ãLÇ²ÅB
É_ÉEÉìÉVÅ[ÉPÉìÉX1Åí250Åéåüím¨ÅjÅFA4/LTR ïÅíþéÜ 4ppm
É_ÉEÉìÉVÅ[ÉPÉìÉX2Åí255Åéåüím¨ÅjÅFA4/LTR ïÅíþéÜ 3ppm
É_ÉEÉìÉVÅ[ÉPÉìÉX3Åí260Åéåüím¨ÅjÅFA4/LTR ïÅíþéÜ 2ppm

6.ó,ãpÉÇÅ[Éh
òAë±ÉvÉäÉìÉgÇÝè¨ÉTÉCÉY(*1)ïùópéÜÉvÉäÉìÉgå„Ç…ëÂÉTÉCÉY(*1)ïùópéÜÉvÉäÉìÉgÇšçsÇ§ÇýÅAí[ïîÇýíÜâÕÇÃâ²ìxç²Ç…ÇÊÇËíÖÉIÉtÉZÉbÉgÇ™¡ì¹Ç²ÇÈã×ÇÍÇ™Ç†ÇÈÅBÇªÇÃÇ¾Ç?ÅÀë¨ÉTÉCÉYïùópéÜÉvÉäÉìÉgÇ‹Ç¾ÇÕÅÀÉ_ÉEÉìÉVÅ[ÉPÉìÉXêßå‰å„ÇÕÅÀÉTÉuÉTÅ[É~ÉXÉ^ÇÃâüímâ²ìxÇ™160Åéñ¢ñûÇ…Ç»ÇÈÇ‹ÇÝÅÀÇ‹Ç¾ÇÕÅÀ40ïbä‘ÉÀÉCÉìÉÇÅ[É^ÇšåÒì]ÇµóˌãpÇŠÇ½ÇÈÅBÉÀÉCÉìÉÇÅ[É^í,é~å„ÀÀâ½ãLÇÃÉqÅ[É^ó,ãpéûä‘Çšâoâ?å„ïúãAÇ²ÇÈÅB
*1Å@ëÀÉTÉCÉYÅFópéÜí²270mmà»è„ÇÃópéÜÅ@è¨ÉTÉCÉYÅF215.9mmà»â½ÇÃópéÜ

T-8-2

	è¨ÉTÉCÉYÉvÉäÉìÉgå„			ëÂÉTÉCÉYÉXÉãÅ[ÉvÉbÉgÉ_ÉEÉìå„
èoóÕñáêîÅiñáÅj	1Å`10	11Å`20	21Å`	èoóÕñáêîã÷åWÇ»Çµ
ÉqÅ[É^ó,ãpéûä‘ÅiSÅj	Ç»Çµ	5	10	10

8.2.2.2 Target Temperatures by Mode

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This machine controls the fixing temperature according to the "media type" selected in the user mode and the "target temperature" set in the "special mode."
The correspondence between each mode and target temperature is as follows:

T-8-3

Fixing mode	Paper type	Target initial fixing temperature (*1)	Initial number of sheets (*2)	Condition
Normal	Plain paper (colored paper/ recycled paper/ label sheet (64-80 g/m2)	210 deg C	1-30 (A4/LTR)	Special Mode P: OFF
		195 deg C	1-30 (A4/LTR)	Special Mode P: ON
Rough Paper Lo	Heavy paper 1 (81-90 g/m2)	210 deg C	1-5 (A4/LTR)	
	Heavy paper 2 (91-105g/m2)			
Rough Paper	Heavy paper 3 (106-128g/m2)	215 deg C	1-5 (A4/LTR)	
Postcard	Postcard	215 deg C	1-5	Fix. Unit Offset: OFF
Postcard H	Postcard	215 deg C	1-5	Fix. Unit Offset: 1 or 2
Envelope	Envelope	215 deg C	1-5	
OHP	OHP	195 deg C	1-30 (A4/LTR)	

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

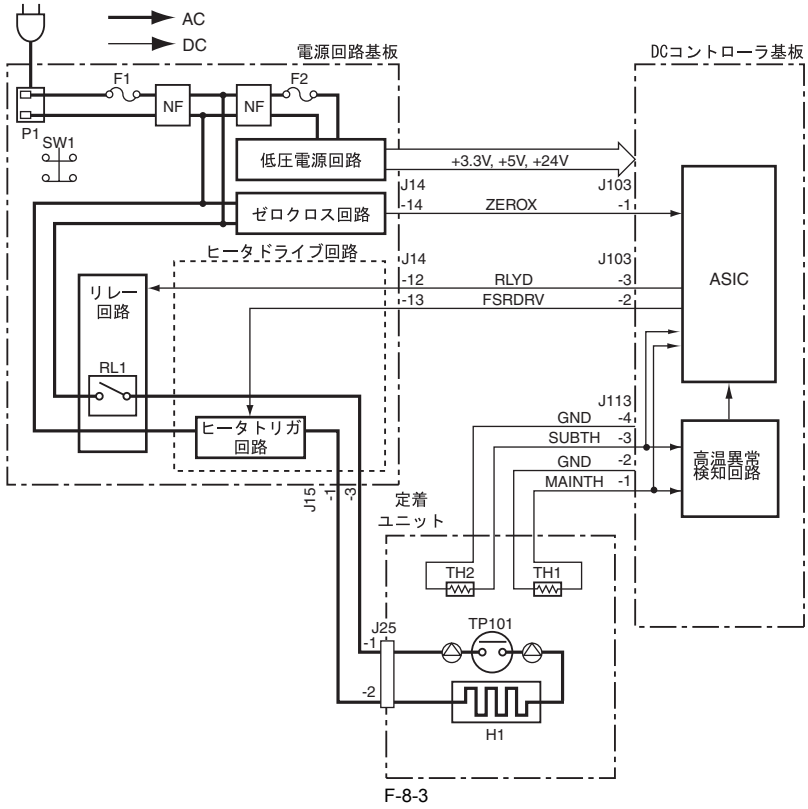
*1: Target fixing temperature at startup. When the initial temperature of the fixing unit is high, the target temperature is lowered. In the continuous copy mode, the target temperature is lowered.
*2: Number of sheets controlled at the initial target temperature. If it is exceeded, the target temperature is lowered. The prescribed number of sheets varies with the paper size.

8.3 Protection Function

8.3.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

ñ¦âÒòHÇÕDCÉRÉìÉgÉçÅ[ÉââÒòHäÓî¬ì‡Ç…Ç†ÇËÅAíÉíÖâ²ixÇÃàŸèÌè³â²ÇšèÌéûäƒéãÇµÇƒÇ¢ÇÈÅBíÉíÖÉqÅ[É^ÇÃâ²ixÇ™è„è³ÇµÅAÉÅÉÇÉìÉTÅ[É~ÉXÉ^ÇÃèoóÕìdàŠÇ™ñÕ0.78Và»â½ÅiñÒ235Åéà»è„ÅjÇšÇPïbä‘ÅAÇ‡ÇµÇ¦ÇÕÅAÉTÉuÉTÅ[É~ÉXÉ^Ç©ÇÁÇÃèoóÕìdàŠÇ™ñÒ0.39Và»â½ÅiñÒ300Åéà»è„ÅjÇš0.15ïbà»è„ÇšåüímC²ÇÈÇýÅACPUÇ©ÇÁèoóÕÇŠÇÍÇÈÉäÉåÅ[ãÎìÆêMçÜÁiRLY-DÅjÇ…ä÷ÇÌÇÁÇ³ÅÁÉäÉåÅ[ÇšOFFÇµÅAíÉíÖÉqÅ[É^ÉwÇÃíþìdÇšé’ífÇ²ÇÈÅB
If the temperature of the fixing heater increases abnormally, on the other hand, to exceed about 228°C, the thermal fuse will melt to cut the power to the fixing heater.



F-8-3

8.3.2 Failure Detection

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The CPU on the DC controller PCB will identify a fault in the fixing assembly if any of the following conditions (a through d) occurs; as a result,
- it will cut the power to the fixing heater.
- it will cause the relay drive signal (RYLD) to go '1' to turn off the relay and, at the same time, will communicate the presence of a fault to the image processor PCB.

a.ÉTÅ[É~ÉXÉ^ÅEÉVÉáÅ[Égåüím ÅiàŸèÌçÇâ²Åj
â²ixêßå‰íÜÇ…ÉÅÉCÉìÉTÅ[É~ÉXÉ^ÇÝ235 Åéà»è„ÇÃèÛë‘Çš1 ïbà»è„òAë±ÇµÇƒåüèoÇµÇ¾èÍçáÅB
â²ixêßå‰íÜÇ…ÉTÉuÉTÅ[É~ÉXÉ^ÇÝ300Åéà»è„ÇÃèÛë‘Çš0.15ïbà»è„òAë±ÇµÇƒåüèoÇµÇ¾èÍçáÅB

b.ÉTÅ[É~ÉXÉ^ÅEÉIÅ[ÉvÉìåüímÅiàŸèÌí·â²Åj
â²ixêßå‰íÜÇ…ÉÅÉCÉìÉTÅ[É~ÉXÉ^ÇÝ20 Åéñ¢ñûÇÃèÛë‘Çš0.5ïbà»è„òAë±ÇµÇƒåüèoÇµÇ¾èÍçáÅB
óßÇøè„Ç×èÍó¼å„ÅAÉTÉuÉTÅ[É~ÉXÉ^ÇÝ35Åéñ¢ñûÇÃèÛë‘Çš0.15ïbà»è„òAë±ÇµÇƒåüèoÇµÇ¾èÍçáÅB
íÉíÖÉqÅ[É^íþìdäJénÇÃ2.29ïbåoâ?å„Ç©ÇÁÅA20ïbà»è„åoâ?ÇµÇƒÇ‡ÅAÉTÉuÉTÅ[É~ÉXÉ^Ç™75Åéà»è„Çšåüèo ÇÝÇ´Ç»Ç¢èÍçá

c.ãÏìÆâÒòHïïàŸèÌåíÉ|ÉçÉNÉçÉXÅEÉGÉâÅ|Åjåüím
1ïbñäÇ…É|ÉçÉNÉçÉXì¸óÕâÒêîÂié¸ãŽÅjÇšÉJÉEÉìÉgÇµÅAÉ[ÉçÉNÉçÉXì¸óÕâÒêîÇ™ÅAîÕàÒÅi45HzÅ`65HzÅjäOÇ…Ç»ÇÈÇÃÇšòAë±ÇµÇƒ2âÒåüímÇµÇ¾èÍçáÅB

d.óßÇøè„Ç×ïsó«åüím
íÉíÖÉqÅ[É^íþìdäJénÇÃ2.29ïbåoâ?å„ÇÃÉÅÉCÉìÉTÅ[É~ÉXÉ^Ç™45Åéñ¢ñûÇšåüèoÇµÇ¾èÍçáÅB
íÉíÖÉqÅ[É^íþìdäJénå„ÅAÉÅÉCÉìÉTÅ[É~ÉXÉ^ÇÃâ²ixÇ™150Åéñ¢ñûÇÝÅAÉÅÉCÉìÉTÅ[É~ÉXÉ^ÇÃ1ïbä‘ÇÃè„è³â²ixÇ™12Åéñ¢ñûÇšåüímÇµÇ¾èÍçáÅB
Ç‹Ç¾ÅA20ïbà»è„åoâ?ÇµÇƒÇ‡ÉÅÉCÉìÉTÅ[É~ÉXÉ^ÇÃâ²ixÇ™ñ¶Wâ²ixÇ…ìûíBÇµÇ»Ç¢èÍçáÅB

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

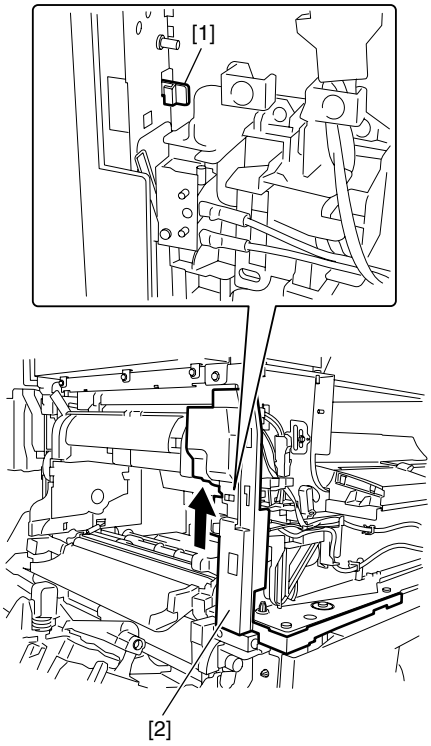
8.4 Parts Replacement Procedure

8.4.1 Fixing Unit

8.4.1.1 Removing the Fixing Unit

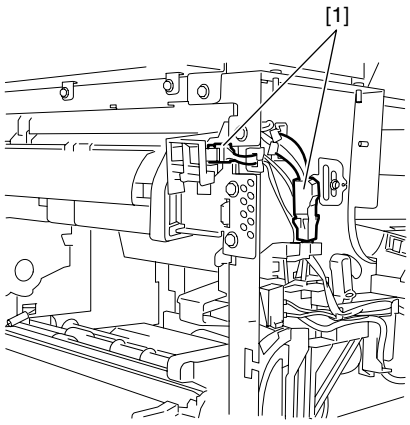
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover and front cover, and then detach the rear-left cover.
2) Remove the boss [1], and then slide the guide (front) [2] to remove it.



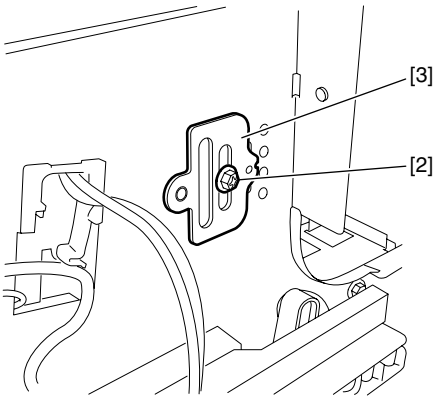
F-8-4

3) Disconnect the two connectors [1], and then release the cable from the clamp.



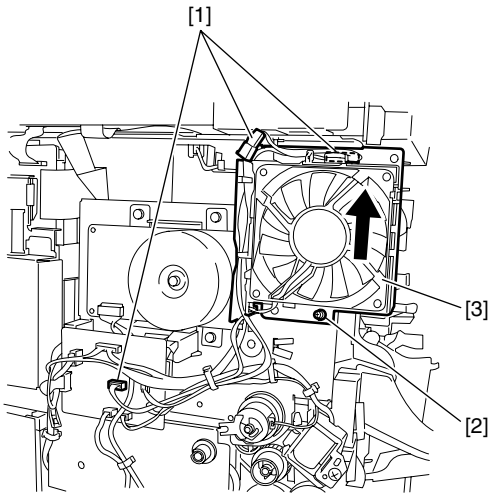
F-8-5

4) Remove the screw [2], and the remove the clamping plate [3].



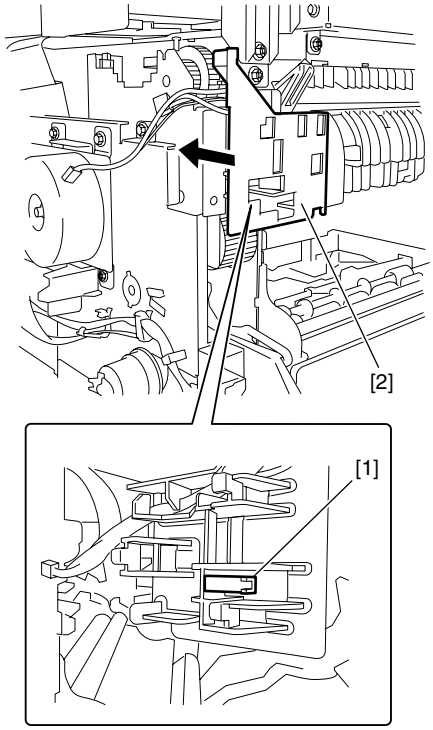
F-8-6

5) Remove the three connectors [1] and one screw [2], and then slide the fan duct [3] upward to remove it.



F-8-7

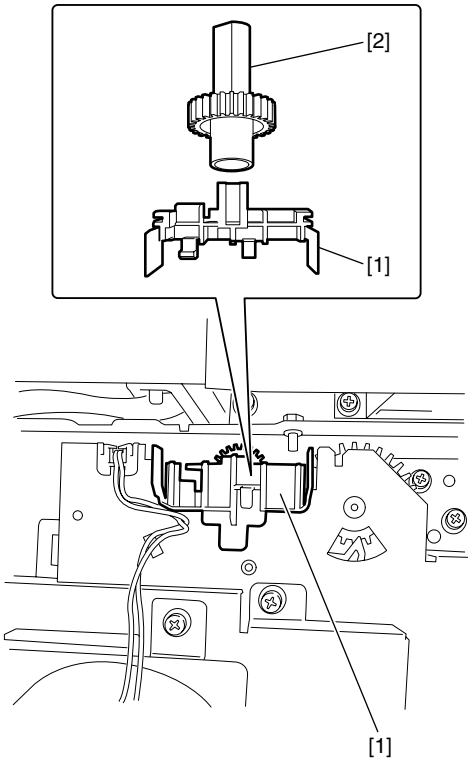
6) Remove the boss [1], and then slide the guide (rear) [2] backward to remove it.



F-8-8

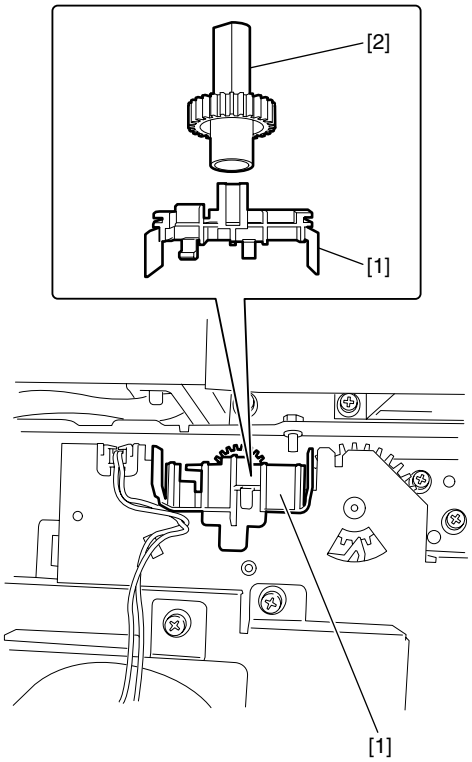
7) Release the hook, remove the fixing gear retainer [1], and then remove the fixing gear [2].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

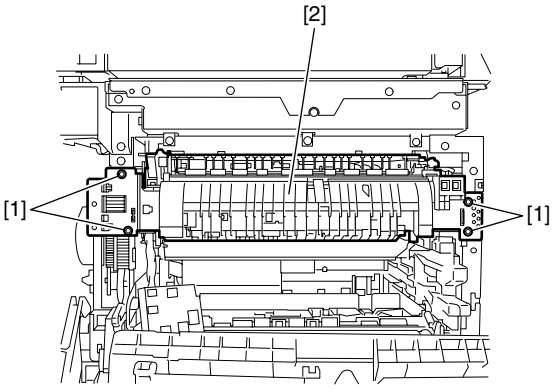


F-8-9

8) Remove the four screws [1], and then remove the fixing unit [2].

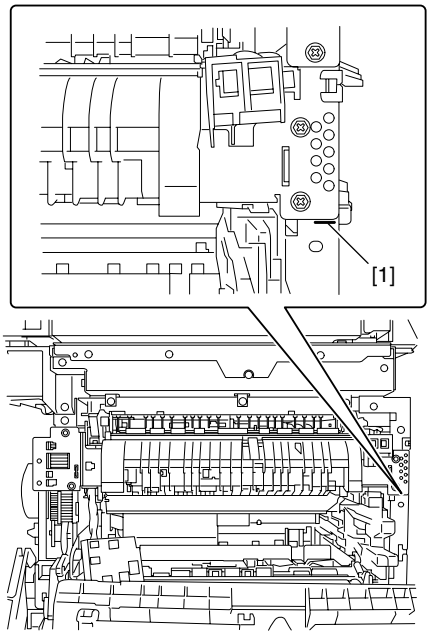


F-8-10



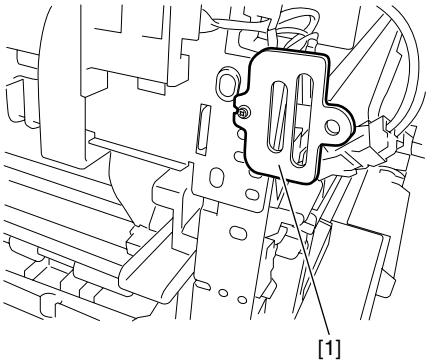
F-8-11

When reinstalling the fixing unit, align it with the mark [1].



F-8-12

If a parallelism error occurs during duplex printing, make the following adjustment:
Attach the clamping plate [1] removed in step 2 using the screw as shown below.
If the same error persists, change the clamping position stepwise.



F-8-13

8.4.2 Fixing Film Unit

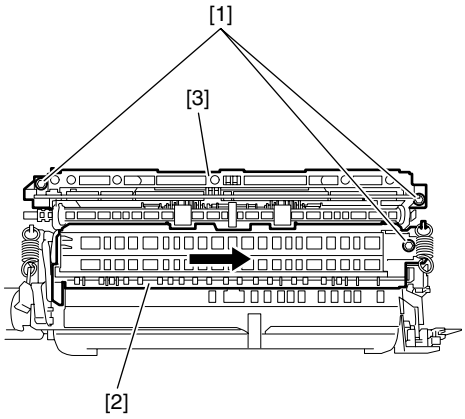
8.4.2.1 Removing the Fixing Film Unit

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the fixing unit.

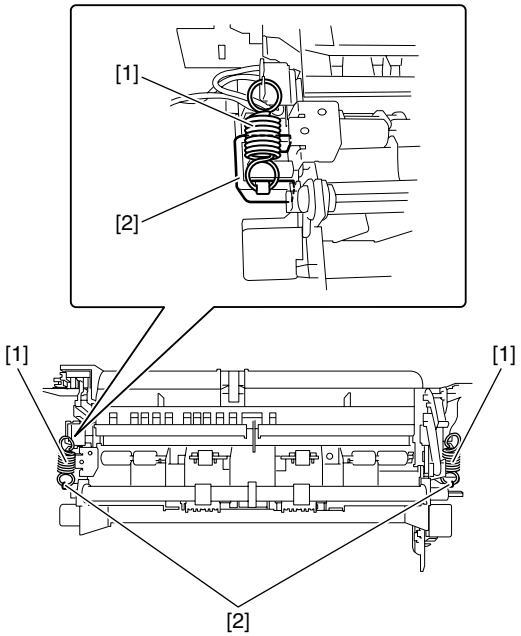
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

2) Remove the three screws [1], and then remove the reversing guide [2] and sensor lever unit [3].



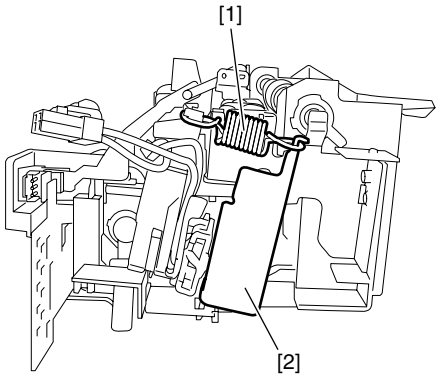
F-8-14

3) Remove the two pressure spring [1], and then remove the two pressure plate [2].



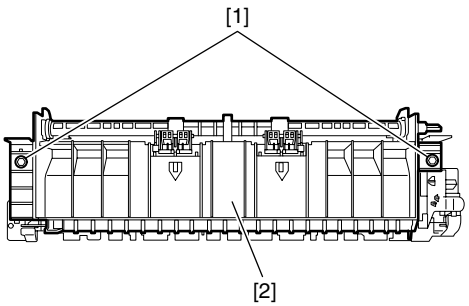
F-8-15

See the illustration below when reinstalling the pressure springs [1] and plates [2].



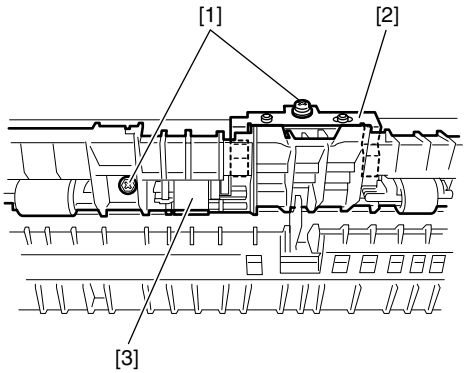
F-8-16

See the illustration below when reinstalling the pressure springs [1] and plates [2].



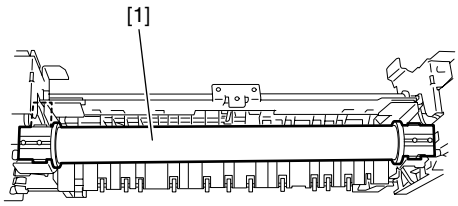
F-8-17

5) Remove the two screws [1], and then remove the grounding plate [2] and guide [3].



F-8-18

6) Remove the fixing film unit [1].



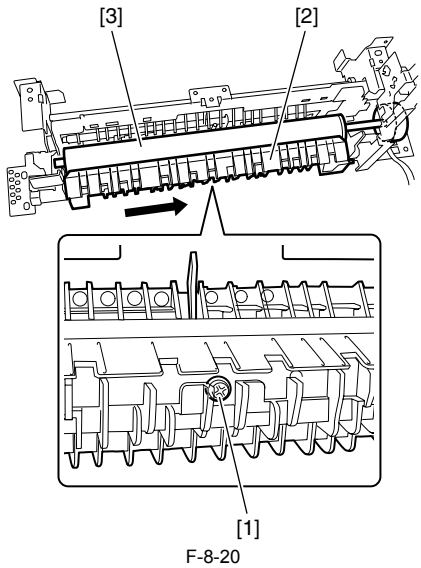
F-8-19

8.4.3 Fixing Pressure Roller

8.4.3.1 Removing the Pressure Roller

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

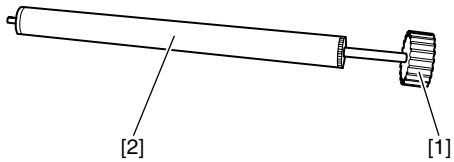
1) Remove the fixing film unit.
2) Remove the screw [1], and then slide the fixing unit inlet guide [2] sideways to release it. (The fixing unit inlet guide need not be removed.)
3) Remove the pressure roller [3].



F-8-20

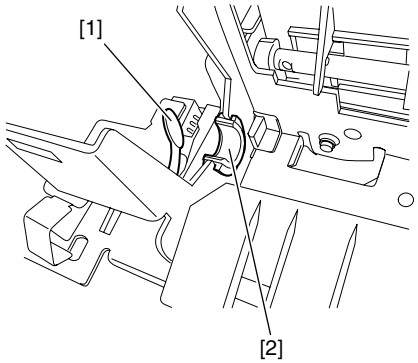
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

4) Release the hook and remove the gear [1]. The remaining part is the pressure roller [2].



F-8-21

Precautions for Installation of Pressure Roller
When reinstalling the pressure roller, pay attention to the following:
1. The pressure roller bearing must be in touch with the leaf spring [1].
2. The left and right bearings [2] must be installed properly.



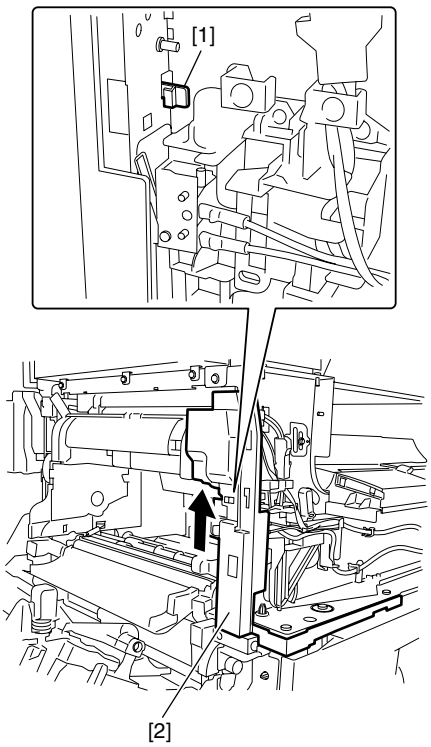
F-8-22

8.4.4 Fixing Delivery Paper Sensor

8.4.4.1 Removing the Delivery Sensor

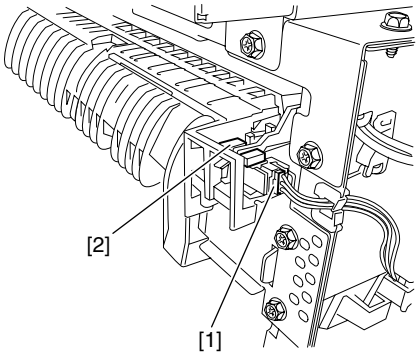
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the front cover and front-left cover.
2) Remove the boss [1], and then slide the guide (front) [2] upward to remove it.



F-8-23

3) Disconnect the connector [1], and remove the delivery sensor [2] with the claw released.



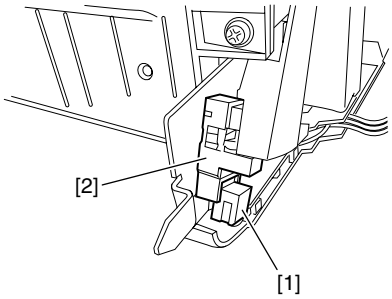
F-8-24

8.4.5 Delivery Full Sensor

8.4.5.1 Removing the Delivery Full Sensor

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the fixing unit.
2) Disconnect the connector [1], and then remove the delivery full sensor [2] with the hook released.



F-8-25

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 9 External and Controls

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

9.1 Control Panel....9-1
9.1.1 Outline....9-1
9.2 Fan....9-1
9.2.1 Outline....9-1
9.3 Power Supply....9-2
9.3.1 Power Supply....9-2
9.3.1.1 Outline....9-2
9.3.1.2 Rated Output of the Power Supply PCB....9-2
9.3.2 Protection Function....9-2
9.3.2.1 Protective Functions....9-2
9.4 Parts Replacement Procedure....9-4
9.4.1 External Cover....9-4
9.4.1.1 Detaching the Reader Rear Cover (Small)....9-4
9.4.1.2 Detaching the Reader Rear Cover....9-4
9.4.1.3 Detaching the Rear Cover....9-4
9.4.1.4 Detaching the Reader Left Cover....9-5
9.4.1.5 Detaching the Front-left Cover....9-5
9.4.1.6 Detaching the Rear-left Cover....9-5
9.4.1.7 Detaching the Reader Right Cover....9-5
9.4.1.8 Detaching the Right Cover....9-6
9.4.1.9 Detaching the Front Cover....9-7
9.4.1.10 Detaching the Delivery Tray....9-7
9.4.2 Operation Panel Unit....9-7
9.4.2.1 Removing the Operation Panel Unit....9-7
9.4.3 Image Processor PCB....9-8
9.4.3.1 Removing the Image Processor PCB....9-8
9.4.3.2 Procedure after Replacing the Image Processor PCB....9-8
9.4.4 DC Controller PCB....9-9
9.4.4.1 Removing the DC Controller PCB....9-9
9.4.5 Powwer Supply PCB....9-9
9.4.5.1 Removing the Power Supply PCB....9-9
9.4.6 Relay PCB....9-9
9.4.6.1 Removing the Relay PCB....9-9
9.4.7 NCU PCB....9-9
9.4.7.1 Removing the NCU PCB....9-9
9.4.8 Modem PCB....9-10
9.4.8.1 Removing the Modem PCB....9-10
9.4.9 Modular Jack PCB....9-10
9.4.9.1 Removing the Modular Jack PCB....9-10
9.4.10 Network PCB....9-10
9.4.10.1 Removing the Network PCB....9-10
9.4.11 Interlock Switch....9-10
9.4.11.1 Removing the Interlock Switch....9-10
9.4.12 Fan....9-10
9.4.12.1 Removing the Heat Discharge Fan....9-10
9.4.13 Speaker....9-11
9.4.13.1 Removing the Speaker....9-11

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

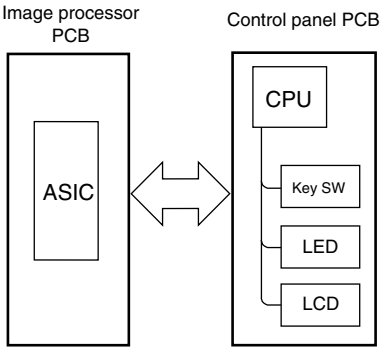
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

9.1 Control Panel

9.1.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine's control panel consists of the following PCBs, and is controlled by the ASIC of the image processor PCB.



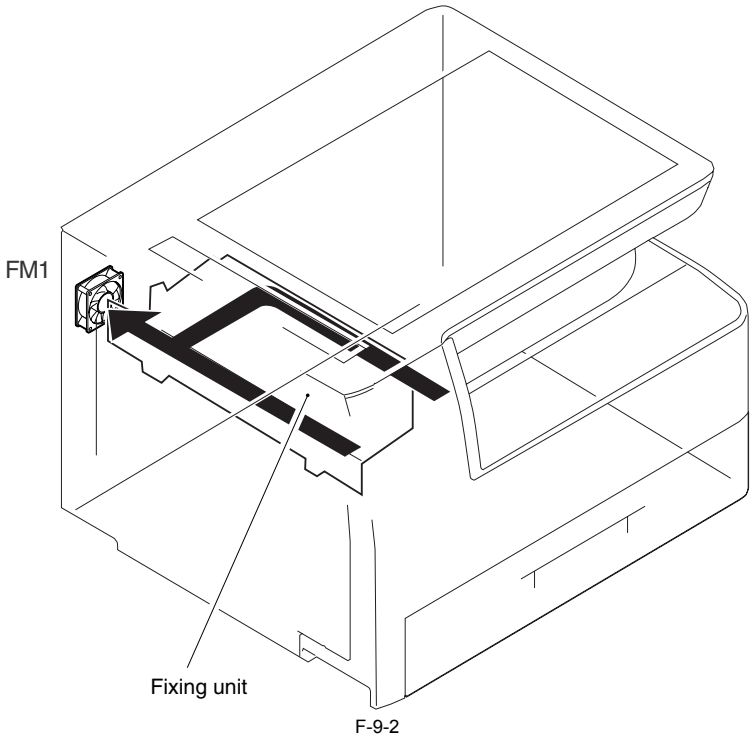
F-9-1

9.2 Fan

9.2.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This machine has a fan on the rear side to discharge the hot air around the fixing unit and cool the laser scanner unit and electric elements on PCBs. The fan is controlled by the CPU on the DC controller PCB. Its operating conditions are as follows:
<Startup conditions>
1. During normal rotation, in the fixing cleaning mode (user mode), or after paper has reached the registration clutch
2. During transfer roller cleaning (user mode) or after operation of the main motor
<Stop conditions>
1. After post-rotation, after completion of the cleaning mode, or 30 seconds after stop of the main motor
2. After stop of the main motor due to opening of a door or occurrence of a jam or other failures
The CPU on the DC controller CPU outputs a Fan Drive signal (FANON = 'H') to turn the fan.
The CPU judges that a fan failure has occurred if it detects a Fan Lock Detection signal (FANLOCK = 'H') during fan rotation.



F-9-2

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

9.3 Power Supply

9.3.1 Power Supply

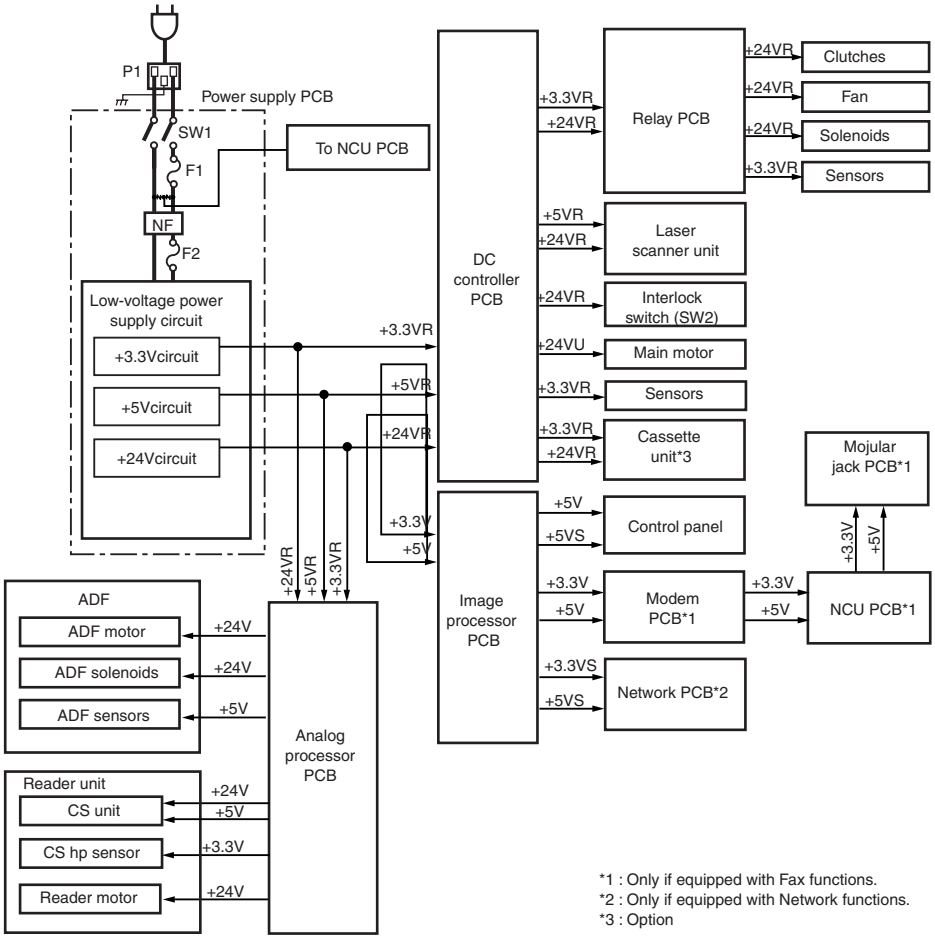
9.3.1.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

When the main power switch (SW1) is turned on, AC power is supplied to the low-voltage power supply circuit in the power supply PCB.
The low-voltage power supply circuit supplies +3.3 V, +5 V, and +24 V to operate the machine.
+24 V is supplied to the motors, fan, electromagnetic clutch, solenoid, etc. +5 V and +3.3 V are supplied to the DC controller PCB, image processor PCB, anlog processor PCB.
There are two types of +24 V voltages: +24 V which is normaly supplied from the low voltage power supply and +24 VR which is cut off when the left door is opened. The +24 VR also plays the role of a door open detection signal (DOPEN). This signal allows the CPU to detect that the left door has opened.

T-9-1

Part Name	Function
Power supply PCB	Generates DC power from AC power.
Main power switch (SW1)	Supplies AC power to the power supply PCB.
Interlock switch (SW2)	Detects opening/closing of the left door and cuts off +24 VR.



F-9-3

9.3.1.2 Rated Output of the Power Supply PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-9-2

Output	24V	5V	5VR	3.3V	3.3VR
Rated output voltage	24V	5.1V	5.1V	3.4V	3.4V
Output voltage tolerance	+10%, -5%	+3%, -4%	+3%, -4%	+3%, -3%	+3%, -3%
Rated output current	4.5A	0.3A	0.7A	2.4A	0.8A
Overcurrent protection trigger current	7.0A	4.0A	2.0A	3.7A	2.0A
Overvoltage protection trigger voltage	32.5V	8.0V	8.0V	5.5V	5.5V

9.3.2 Protection Function

9.3.2.1 Protective Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

The power supply PCB is equipped with an over-current/over-voltage protection mechanism to prevent damage to the power circuit in the event of an over-current or over-voltage, as caused by a short circuit or the like on the load side.
If the over-current/over-voltage protective mechanism has gone ON, disconnect the power cord, and correct the fault; then, connect the power cord once gain to reset the machine. If short circuiting and resetting are repeated, the internal fuse (F1, F2) can melt.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

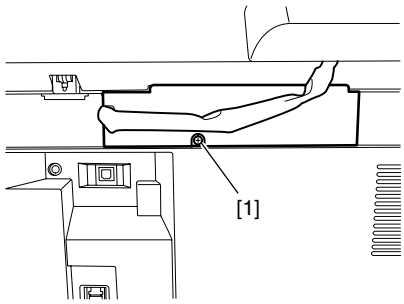
9.4 Parts Replacement Procedure

9.4.1 External Cover

9.4.1.1 Detaching the Reader Rear Cover (Small)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the screw [1], and then detach the reader rear cover (small).

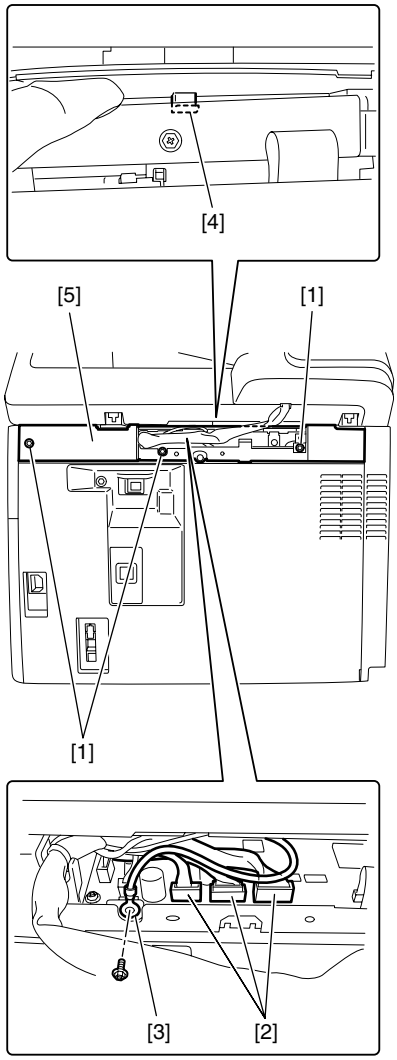


F-9-4

9.4.1.2 Detaching the Reader Rear Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Open the ADF.
2) Detach the reader rear cover.
3) Remove the three screws [1], disconnect the three connectors [2], and then remove the ground wire [3].
4) While pushing the reader rear cover [5] upward with your finger to release the claw [4], slide the cover backward to remove it.



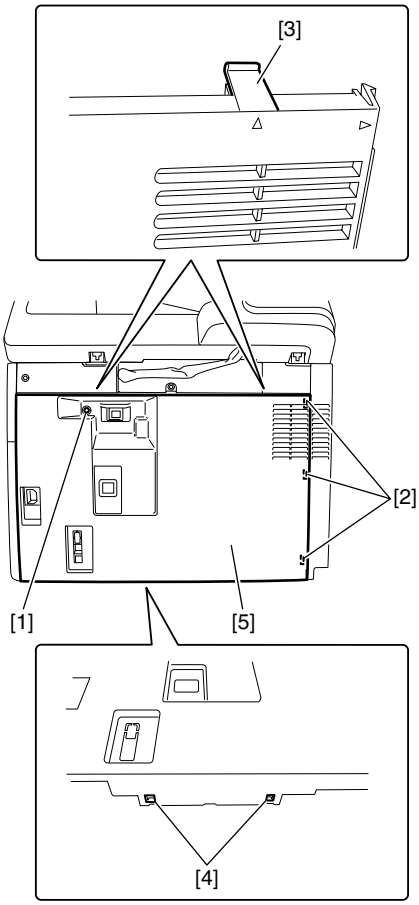
F-9-5

9.4.1.3 Detaching the Rear Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) To release the hooks at the back of the machine, move the machine backward until the hooks are about 10 cm away from the edge of the desk and so on.
2) Remove the screw [1].
3) Release the three claw s[2] at the right and the two claws [3] at the top.
4) Release the two claws [4] at the bottom, and then detach the rear cover [5].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

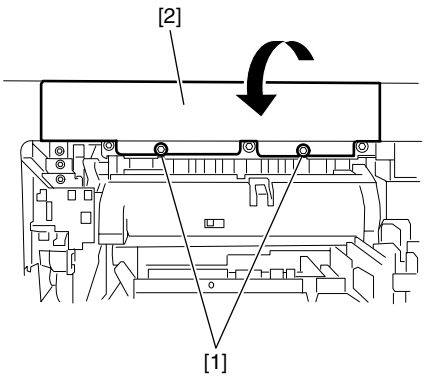


F-9-6

9.4.1.4 Detaching the Reader Left Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Open the left door.
2) Remove the two screws [1], and then detach the reader left cover [2] as shown.

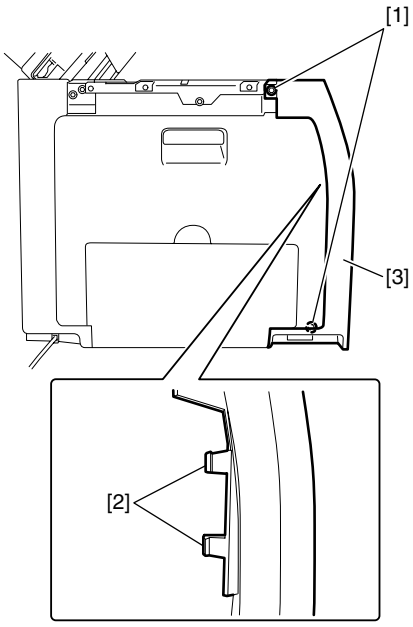


F-9-7

9.4.1.5 Detaching the Front-left Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the reader left cover.
2) Remove the two screws [1].
3) Open the left door.
4) Release the two claws [2], and then detach the front-left cover [3].

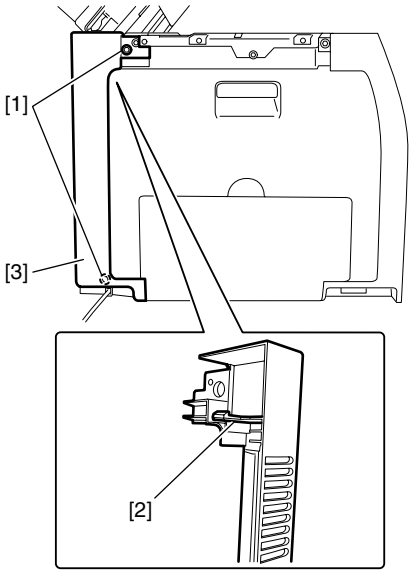


F-9-8

9.4.1.6 Detaching the Rear-left Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover and reader left cover.
2) Remove the two screws [1].
3) Open the left door.
4) Release the inner hook [2] by accessing it from the back of the machine, and then detach the rear-left cover [3].



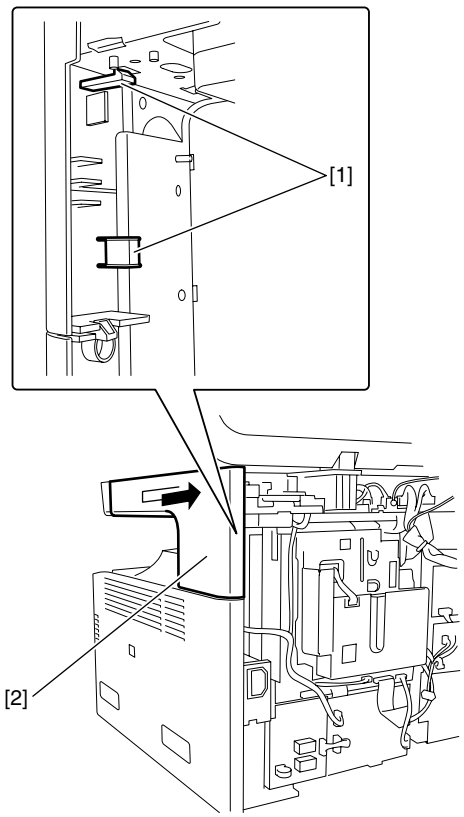
F-9-9

9.4.1.7 Detaching the Reader Right Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the copyboard glass holder (right), and then detach the reader rear cover and rear cover.
2) Release the two hooks [1], and then slide the reader right cover [2] in the direction of the arrow to detach it.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

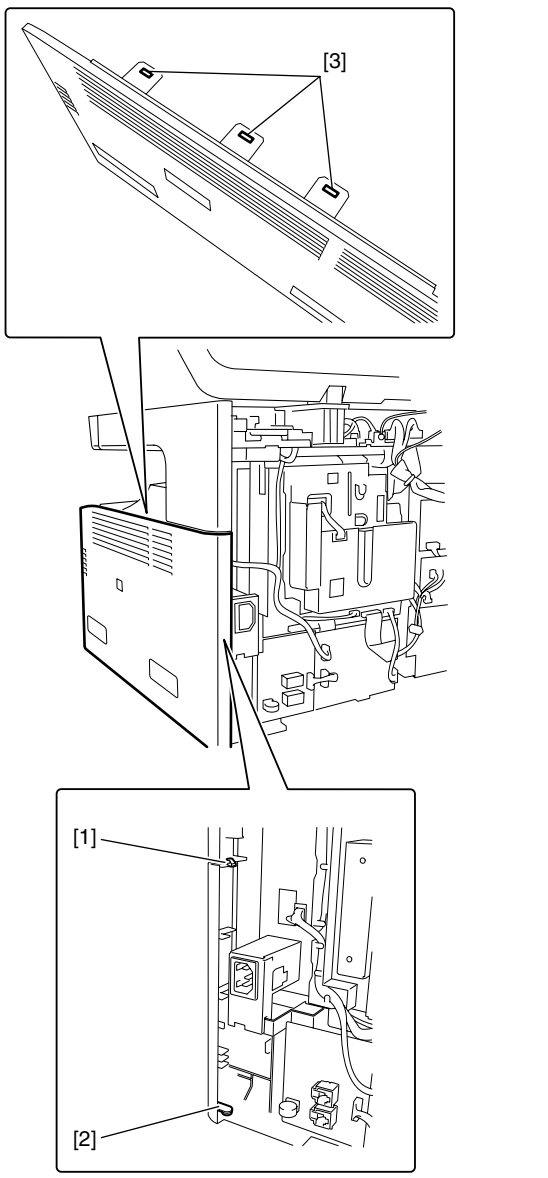


F-9-10

9.4.1.8 Detaching the Right Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

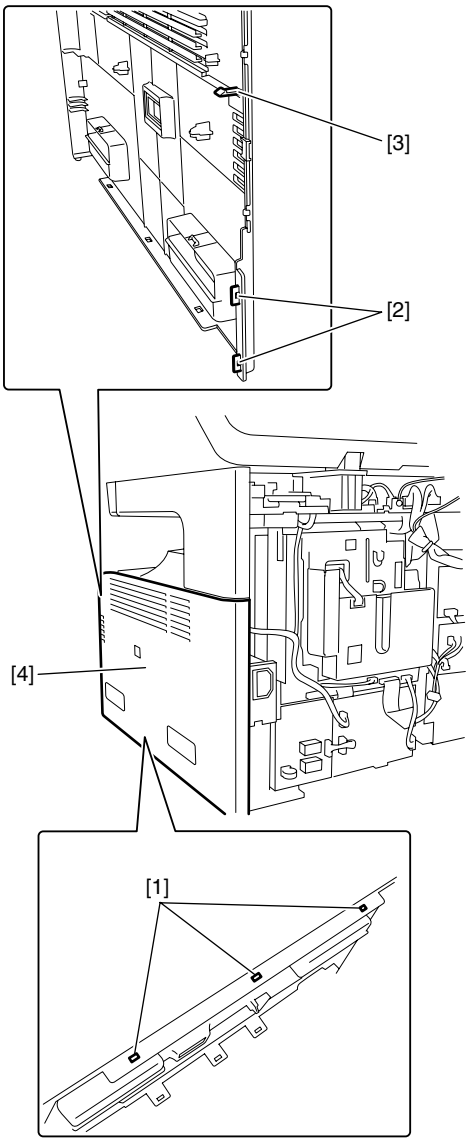
1) Detach the rear cover.
2) To release the hooks at the lower right of the machine, float the right side of the machine about 10 cm above the edge of the desk and so on.
3) Release the claw [1] and boss [2] at the rear back of the right cover.
4) Using a flathead screwdriver, release the three claws [3] at the top of the right cover.



F-9-11

5) Release the three hooks [1] at the bottom of the machine.
6) Release the two hooks [2] at the lower right and one claw [3] at the upper right to remove the right cover [4].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

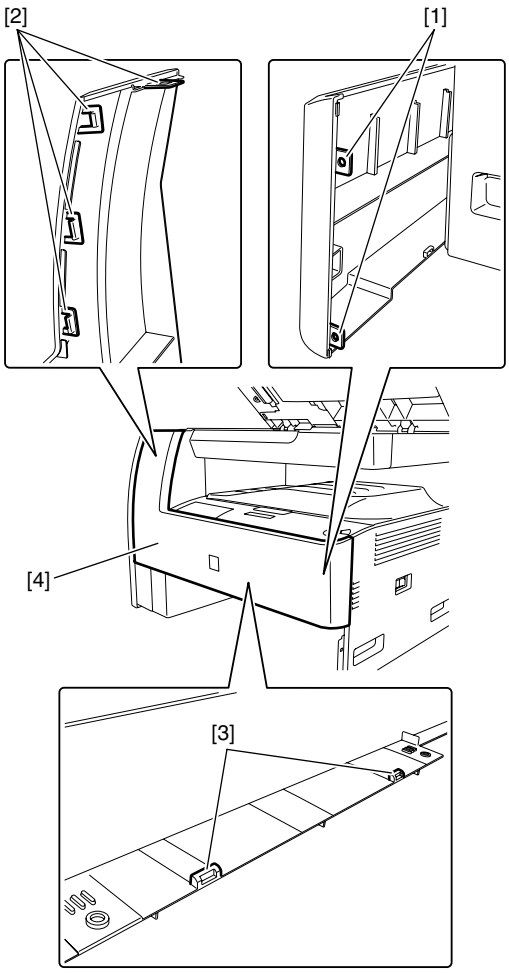


F-9-12

9.4.1.9 Detaching the Front Cover

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Remove the cassette.
2) Using a flathead screwdriver, release the two claws [1] at the right and four hooks [2] at the top.
3) By releasing the two bosses [3] at the bottom, detach the inner cover [4].

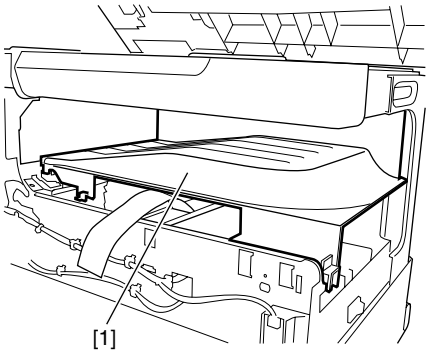


F-9-13

9.4.1.10 Detaching the Delivery Tray

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the operation panel.
2) Detach the delivery tray [1].



F-9-14

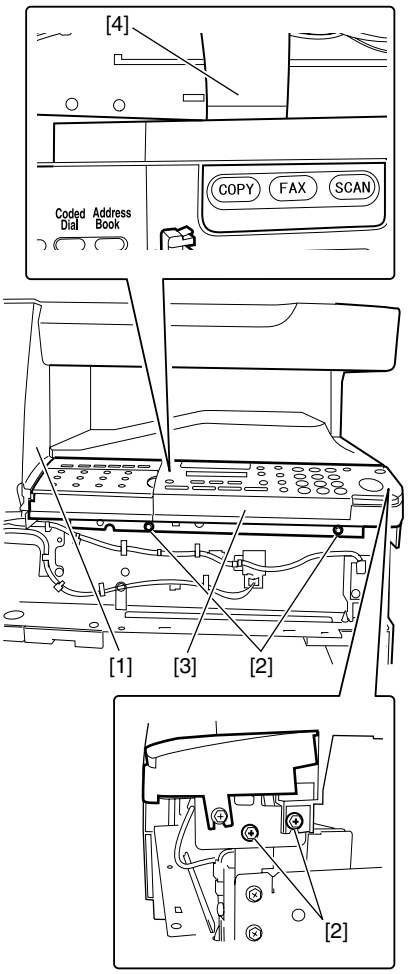
9.4.2 Operation Panel Unit

9.4.2.1 Removing the Operation Panel Unit

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the right cover and inner cover.
2) Detach the delivery tray front cover [1].
3) Remove the four screws [2].
4) Pull out the operation panel [3] slightly, and then remove the flexible cable [4].

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



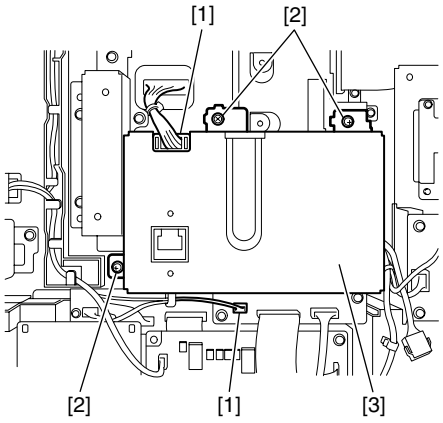
F-9-15

9.4.3 Image Processor PCB

9.4.3.1 Removing the Image Processor PCB

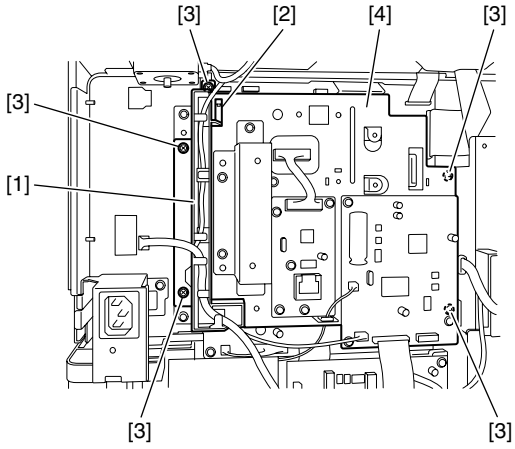
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Remove the modular jack PCB.
3) Disconnect the two connectors [1], and then release the cable from the clamp.
4) Remove the three screws [2], and then remove the shield [3].



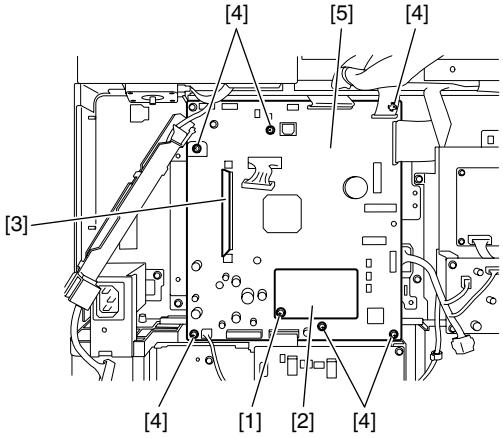
F-9-16

5) Disconnect all connectors from the modem PCB and network PCB.
6) Disconnect the connector of the cable in the guide [1], remove the claw [2], and slide the guide [1] upward to remove it.
7) Remove the five screws [3], and then remove the IP cover [4].



F-9-17

8) Remove the screw [1], and then remove the ROM PCB [2].
9) Remove the memory PCB [3].
10) Disconnect all connectors and flexible cables from the image processor PCB.
11) Remove the six screws [4], and then remove the image processor PCB [5].



F-9-18

9.4.3.2 Procedure after Replacing the Image Processor PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

If you have replaced the image processor PCB with a new one, perform the following operations:
- Using the service support tool, download the latest firmware (System/Boot/PCL*1) and language files.
*1: if equipped with PCL functions
- Delete the languages not used at the destination (Service mode > CLEAR > FILE SYSTEM).
- Input the all value printed on the service label affixed to the rear cover.
Make the following adjustments:
- Correction of output between CIS channels
1) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
2) Press the arrow key on the touch panel to display "TEST MODE".
3) Press [OK].
4) Press the [2] key to display "SCAN TEST".
5) Press the [1] key to display "SHADING".
6) Press [OK].
After completion of the above procedure, the contact sensor output is compensated and parameters are set automatically.
After completion of automatic adjustment, "OK" is displayed.
- Read position adjustment (Stream reading: Only when the ADF is installed)
1) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
2) Press the arrow key on the touch panel to display "TEST MODE".
3) Press [OK].
4) Press the [2] key to display "SCAN TEST".
5) Press the [3] key to display "SHEET POS ADJ".
6) Press [OK].
The optical system starts scanning. Several seconds later, automatic adjustment of the reading position finishes and "OK" appears.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

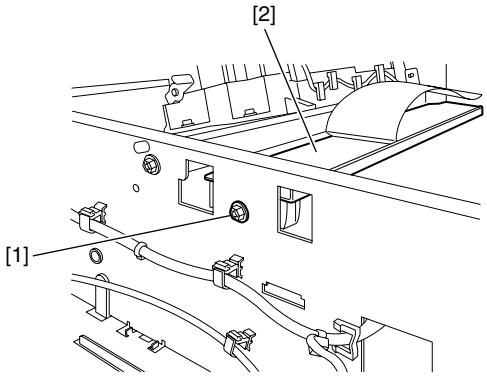
If automatic adjustment fails, "NG" appears. Perform the following procedure:
Clean the platen guide of the DADF and the document glass of the host machine, and then retry auto adjustment.

9.4.4 DC Controller PCB

9.4.4.1 Removing the DC Controller PCB

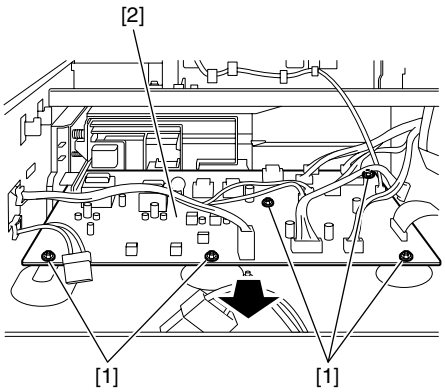
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the right cover, inner cove, delivery tray front cover, and delivery tray.
2) Remove the speaker and power supply PCB.
3) Remove the screw [1], and the remove the flexible cable stay [2].



F-9-19

4) Disconnect all connectors from the DC controller PCB.
5) Remove the five screws [1], and then remove the DC controller PCB [2].



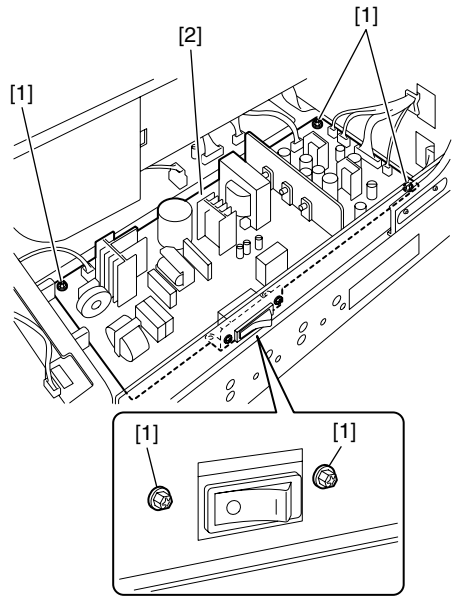
F-9-20

9.4.5 Powwer Supply PCB

9.4.5.1 Removing the Power Supply PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the right cover, inner cover, and delivery tray front cover, and then remove the operation panel and delivery tray.
2) Remove the speaker.
3) Disconnect all connectors on the power supply PCB.
4) Remove the five screws [1], and then remove the power supply PCB [2].



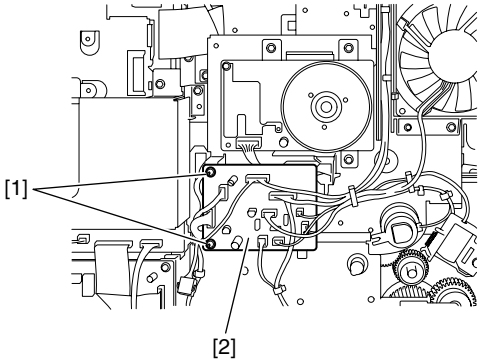
F-9-21

9.4.6 Relay PCB

9.4.6.1 Removing the Relay PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Disconnect all connectors from the relay PCB.
3) Remove the two screws [1] and relay PCB [2].



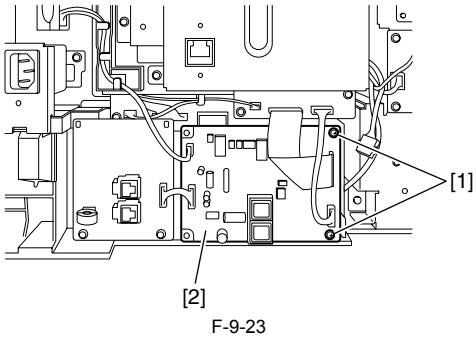
F-9-22

9.4.7 NCU PCB

9.4.7.1 Removing the NCU PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Remove all connectors and flexible cables from the NCU PCB.
3) Remove the two screws [1], and then remove the NCU PCB [2].



F-9-23

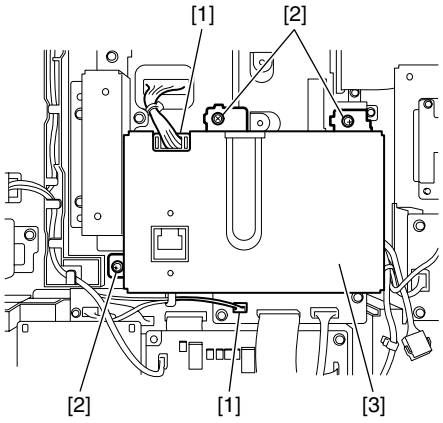
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

9.4.8 Modem PCB

9.4.8.1 Removing the Modem PCB

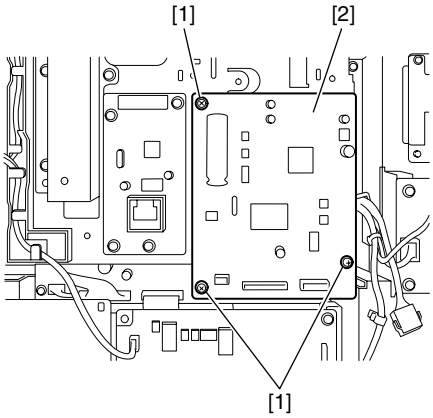
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Disconnect the two connectors [1], and then release the cable from the clamp.
3) Remove the three screws [2], and then remove the shield [3].



F-9-24

4) Disconnect all connectors from the modem PCB.
5) Remove the three screws [1], and then remove the modem PCB [2].



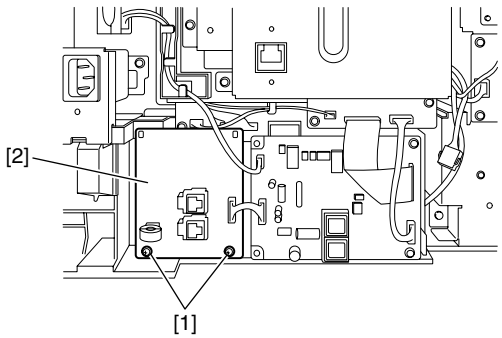
F-9-25

9.4.9 Modular Jack PCB

9.4.9.1 Removing the Modular Jack PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Disconnect all connectors from the modular jack PCB.
3) Remove the two screws [1], and then remove the modular jack PCB [2].



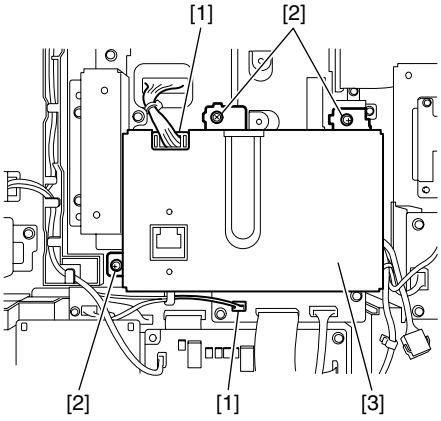
F-9-26

9.4.10 Network PCB

9.4.10.1 Removing the Network PCB

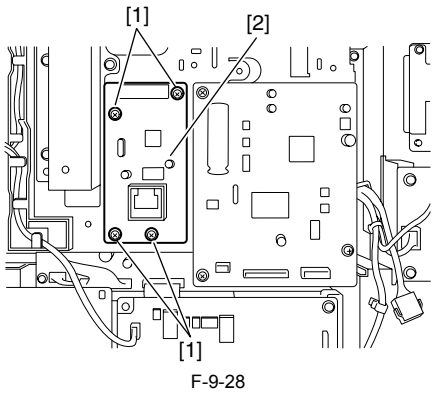
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover.
2) Disconnect the two connectors [1], and then release the cable from the cable clamp.
3) Remove the three screws [2], and then remove the shield [3].



F-9-27

4) Disconnect all connectors from the network PCB.
5) Remove the four screws [1], and then remove the network PCB [2].



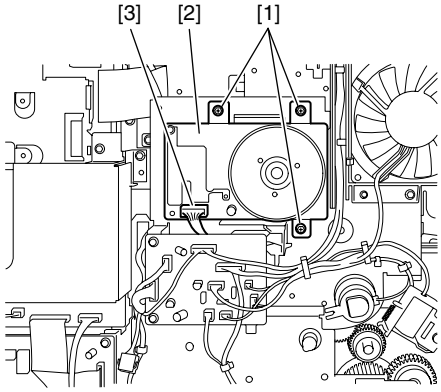
F-9-28

9.4.11 Interlock Switch

9.4.11.1 Removing the Interlock Switch

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the right cove and inner cover and remove the delivery tray.
2) Disconnect the connector (J112) from the DC controller PCB, and then remove the cable from the cable guide by cutting cable ties.
3) Release the two claws [1], and then remove the interlock switch [2].



F-9-29

9.4.12 Fan

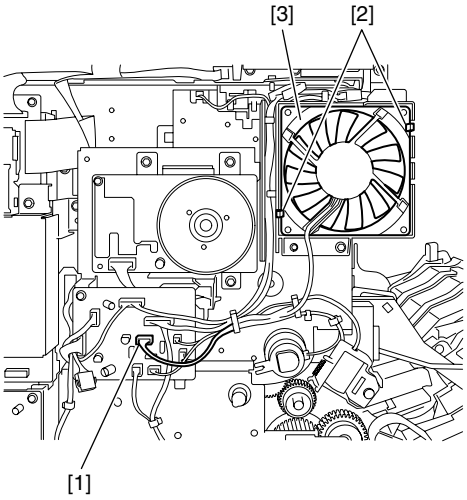
9.4.12.1 Removing the Heat Discharge Fan

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Detach the rear cover and rear-left cover.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

2) Disconnect the connector [1], release the two hooks [2], and then remove the heat discharge fan [3].



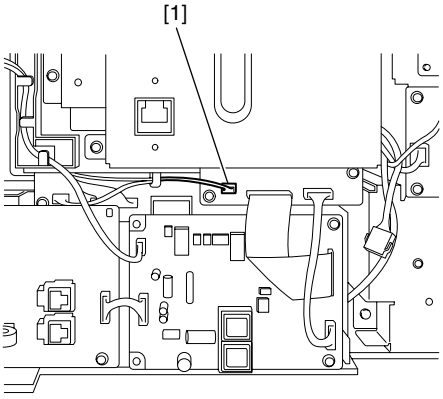
F-9-30

9.4.13 Speaker

9.4.13.1 Removing the Speaker

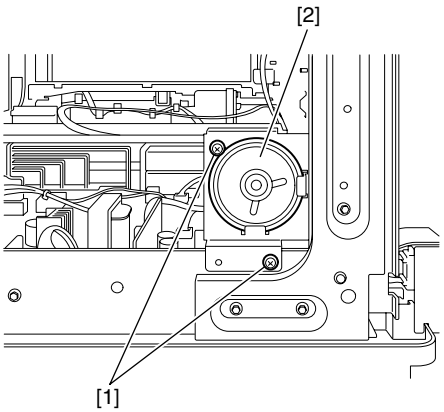
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / Kaser-Base MF6560PL / / LaserBase MF6580PL

1) Detach the right cover and rear cover.
2) Disconnect the connector [1], and then remove the cable from the cable guide.



F-9-31

3) Remove the two screws [1], and then remove the speaker [2].



F-9-32

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 10 Maintenance and Inspection

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

10.1 Periodically Replaced Parts 10-1
10.1.1 Periodically Replaced Parts 10-1
10.2 Consumables 10-1
10.2.1 Durables 10-1
10.3 Periodical Service 10-1
10.3.1 Periodeical Service Items 10-1

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

10.1 Periodically Replaced Parts

10.1.1 Periodically Replaced Parts

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine does not have parts that require periodical replacement.

10.2 Consumables

10.2.1 Durables

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine does not have durables.

10.3 Periodical Service

10.3.1 Periodeical Service Items

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The machine does not have periodecal service items.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 11 Measurement and Adjustments

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

11.1 Scanning System 11-1
11.1.1 Procedure after Replacing the CS 11-1
11.2 Fixing System 11-1
11.2.1 平行性の調整 11-1
11.3 Electrical Adjustments 11-1
11.3.1 Procedure after Replacing the Image Processor PCB 11-1
11.3.2 Actions to Take before All Clearing (Backing up the User Data) 11-1
11.4 ADF 11-2
11.4.1 Outline 11-2
11.4.1.1 Outline 11-2
11.4.1.2 Preparing a Test Sheet for Adjustment 11-2
11.4.2 Adjusting the Mechanical System 11-2
11.4.2.1 Adjusting the Perpendicularity 11-2
11.4.3 Adjusting the Electrical System 11-2
11.4.3.1 Adjusting the Magnification 11-2
11.4.3.2 Adjusting the Horizontal Registration 11-3
11.4.3.3 Leading edge registration adjustment 11-3

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

11.1 Scanning System

11.1.1 Procedure after Replacing the CS

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

After replacing the contact sensor (CS), go through the following steps to perform inter-channel output correction:
1) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
2) Press the arrow key on the touch panel to display "TEST MODE".
3) Press [OK].
4) Press the [2] key to display "SCAN TEST".
5) Press the [1] key to display "SHADING".
6) Press [OK].
After completion of the above procedure, the contact sensor output is compensated and parameters are set automatically.
After completion of automatic adjustment, "OK" is displayed.

11.2 Fixing System

11.2.1 ï¾çsê´ÇÃíðêÆ

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

11.3 Electrical Adjustments

11.3.1 Procedure after Replacing the Image Processor PCB

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

If you have replaced the image processor PCB with a new one, perform the following operations:
- Using the service support tool, download the latest firmware (System/Boot/PCL*1) and language files.
*1: if equiped with PCL functions.
- Input the all value printed on the service label affixed to the rear cover.
Make the following adjustments:
- Correction of output between CIS channels
1) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
2) Press the arrow key on the touch panel to display "TEST MODE".
3) Press [OK].
4) Press the [2] key to display "SCAN TEST".
5) Press the [1] key to display "SHADING".
6) Press [OK].
After completion of the above procedure, the contact sensor output is compensated and parameters are set automatically.
After completion of automatic adjustment, "OK" is displayed.
- Read position adjustment (Stream reading: Only when the ADF is installed)
1) Enter the service mode.
Sequentially press the Additional functions key, 2 key, 8 key, and Additional functions key on the operation panel.
2) Press the arrow key on the touch panel to display "TEST MODE".
3) Press [OK].
4) Press the [2] key to display "SCAN TEST".
5) Press the [3] key to display "SHEET POS ADJ".
6) Press [OK].
The optical system starts scanning. Several seconds later, automatic adjustment of the reading position finishes and "OK" appears.

If automatic adjustment fails, "NG" appears. Perform the following procedure:
Clean the platen guide of the DADF and the document glass of the host machine, and then retry auto adjustment.

11.3.2 Actions to Take before All Clearing (Backing up the User Data)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

- Performing the all-clear operation in the service mode (#CLEAR > ALL) erases/initializes the user data such as address data and user mode settings.
Be sure to back up the user data with the data export function before starting the all-clear operation, and then load the user data with tbe data import function.
- To export and import user data, a PC and a USB cable are required. Have them on hand.

a. Exporting user data
1) Output a user data list in the following user mode.
> Report Setting > Plint List > User Data List
2) Press the following keys to enter the service mode.
> 2 key > 8 key >
3) Select "#SYSTEM" using ◀ or ▶, and then press the OK.
4) Select "#SYSTEM SW" using ◀ or ▶, and then press the OK.
5) Press the following keys to display "SW003."
> 0 key > 3 key
Message: #SYSTEM SW003 00001000
6) Position the cursor at Bit-6 (second from left) using ◀ or ▶, and then press the 1 key.
Message: #SYSTEM SW003 01001000
7) Press the OK key. Check that "SW003" changes to "SW004".
Message: #SYSTEM SW004 00000000
8) Press the Reset key to exit the service mode.
9) Turn off the main power switch, and then turn it on again.
10) Start the PC and connect it to this machine with a USB cable.
11) Open My Computer on the PC to check that the "Removable Disk" icon is displayed. If the "Removable Disk" icon is not displayed, repeat the above procedure starting with step 1.
12) Double-click the "Removable Disk" icon, and then copy the user data (address_book.abk and user_data.dat) onto the Desktop.
13) Close the window on the Desktop.
14) Turn off the main power switch of this machine.
15) Disconnect the USB cable from this machine.

b. Importing user data
1) Press the flowing keys to enter the service mode.
> 2 key > 8 key >
2) Select "#SYSTEM" using ◀ or ▶, and then press the OK.
4) Select "#SYSTEM SW" using ◀ or ▶, and then press the OK.
5) Press the following keys to display "SW003".
> 0 key > 3 key
Message: #SYSTEM SW003 00001000
5) Check that Bit-6 (second from left) is set to set to "1". If Bit-6 is not set to "1", position the cursor at this bit using ◀ or ▶ and then press the 1 key.
Message: #SYSTEM SW003 01001000
6) Press the OK key. Check that "SW003" changes to "SW004".
Message: #SYSTEM SW004 00000000
7) Press the Reset key to exit the service mode.
8) Turn off the main power switch, and then turn it on again.
9) Open My Computer on the PC to check that the "Removal Disk" icon is displayed.
11) Write the user data (address_book.abk and user_data.dat) copied onto the Desktop as described in "a. Exporting user data" over the removable disk.
12) Disconnect the USB cable from the machine.
13) Turn off the main power switch of the machine.
14) Perform steps 1) to 4) again to reset Bit-6 of "SW003" to "0".
15) Press the OK key. When "SW003" changes to "SW004", press the Reset key to exit the service mode.
16) Check the user data list output as described in "a. Exporting user data" to make sure that the user data has been loaded into the machine properly.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

11.4 ADF

11.4.1 Outline

11.4.1.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This machine has the following adjustment items. Make the necessary adjustments after replacing each part.

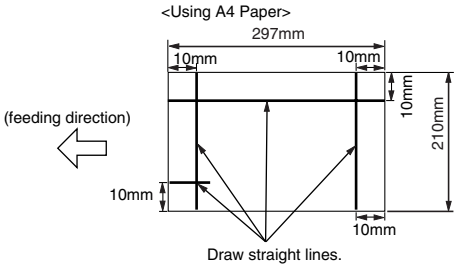
T-11-1

No.	Adjustment type	Replaced parts
[1]	Perpendicularity adjustment	Hinge
[2]	Magnification adjustment	Motor/roller
[3]	Side registration adjustment	-
[4]	Leading edge registration adjustment	-

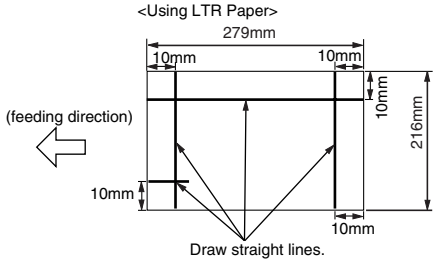
11.4.1.2 Preparing a Test Sheet for Adjustment

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Preparing a Test Sheet: On a sheet of A4 or LTR paper, draw straight lines as indicated:



F-11-1



F-11-2

11.4.2 Adjusting the Mechanical System

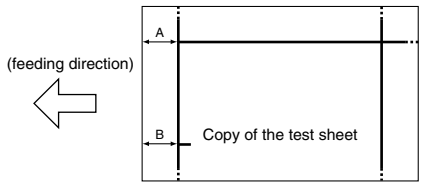
11.4.2.1 Adjusting the Perpendicularity

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) reate a test chart, load it in the DADF, and make a copy of it.
2) Compare the lines at the end of the test chart with those on the copy for perpendicularity. Measure dimensions A and B at the end of the copy and adjust the amount of skew (the range shown in the table) to within the spec.

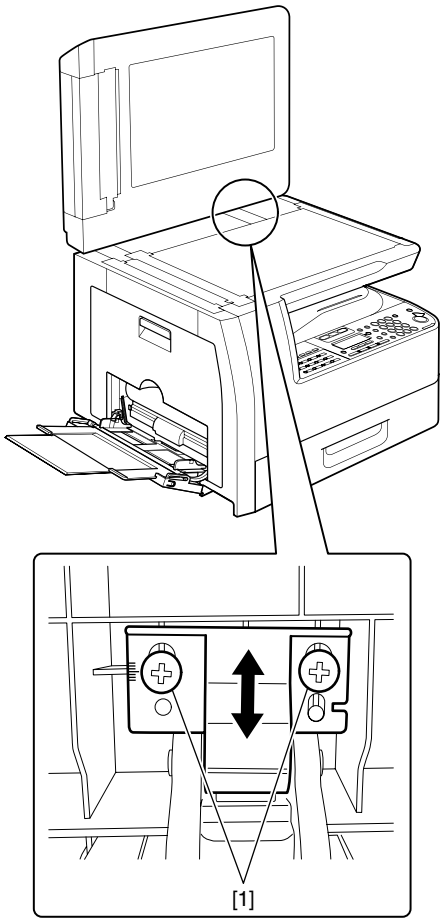
T-11-2

	Dimension (using A4)	Dimension (using LTR)
A-B	0 +/- 1.5 mm	0 +/- 1.5 mm



F-11-3

3) Loosen the two screws [1] securing the right hinge and slide the hinge according to the sale markings so that the perpendicularity is within spec.



F-11-4

4) Tighten the screws you loosened in step 3.

11.4.3 Adjusting the Electrical System

11.4.3.1 Adjusting the Magnification

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Create a test chart, load it in the DADF, and make a copy of it. This copy is called copy A.
2) Compare the longitudinal image length on the test chart with that on copy A. If required, make an adjustment in the service mode.
(A4-size paper: 277 +/-1mm LTR paper: 59 +/-1mm)
Image on copy A is shorter. -> Increase the value (or reduce the stream reading speed).
Image on copy A is longer. -> Decrease the value (or increase the stream reading speed).
3) Enter the service mode.
Sequentially press the User Mode key, 2 key, 8 key, and User Mode key on the operation panel of the host machine.
4) Using the arrow keys on the operation panel, display "#SCAN".
5) Press the OK key.
6) Using the arrow keys on the operation panel, display "#SCAN NUMERIC".
7) Press the OK key.
8) Using the arrow keys, select "48".

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

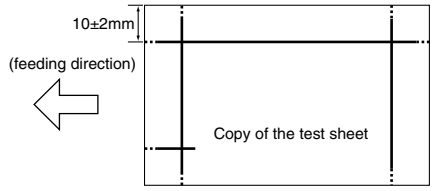
9) Using the numeric keys, change the value to determine the optimum value. Next, press the OK key. (Default: 32)

Do not change the adjustment value excessively.

11.4.3.2 Adjusting the Horizontal Registration

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

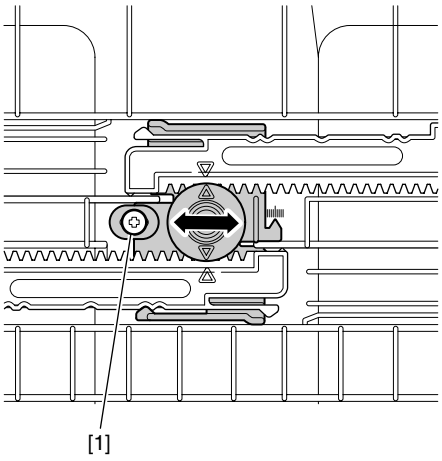
1) Load the test chart in the DADF and make a copy of it.
2) Compare the horizontal registration of the chart with that of the copy. If required, make an adjustment.
The specified horizontal registration is 10mm +/-2mm.



F-11-5

1) Load the test chart in the DADF and make a copy of it.
2) Compare the horizontal registration of the chart with that of the copy. If required, make an adjustment.
The specified horizontal registration is 10mm +/-2mm.
3) Enter the service mode.
Sequentially press the User Mode key, 2 key, 8 key, and User Mode key on the operation panel of the host machine.
4) Using the arrow keys on the operation panel, display "#SCAN".
5) Press the OK key.
6) Using the arrow keys on the operation panel, display "#SCAN NUMERIC".
7) Press the OK key.
8) Using the arrow keys, select "41".
9) Using the numeric keys, change the value to determine the optimum value. Next, press the OK key. (Default: 0)

If the registration cannot be set to the specified value using software, use the following procedure:
1) Open the ADF pickup tray.
2) Loosen the two screws [1] and move the slide guide forward or backward according to the scale calibrated in mm so that the registration is within spec.



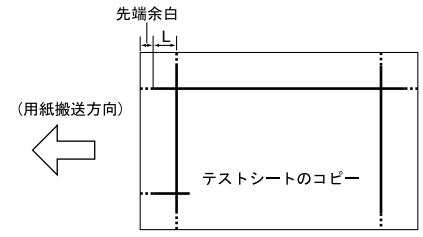
F-11-6

MEMO:
Making copies with the slide guide shifted 1 mm upward will increase the right registration (on the upper side of paper) by 1 mm.

11.4.3.3 Leading edge registration adjustment

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Load the test chart in the DADF and make a copy of it.
2) Compare the end registration of the test chart with that on the copy. If required, make an adjustment.
The specified end registration is 10mm +/-2mm.



F-11-7

The image is shifted to the left. -> Decrease the value.
The image is shifted to the right. -> Increase the value.
Unit of adjustment 1 = 0.1 mm
3) Enter the service mode.
Sequentially press the User Mode key, 2 key, 8 key, and User Mode key on the operation panel of the host machine.
4) Using the arrow keys on the operation panel, display "#SCAN".
5) Press the OK key.
6) Using the arrow keys on the operation panel, display "#SCAN NUMERIC".
7) Press the OK key.
8) Using the arrow keys, select "42".
9) Using the numeric keys, change the value to determine the optimum value. Next, press the OK key. (Default: 219)

If the registration cannot be set to the specified value using software, make adjustments again starting with the perpendicular adjustment.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 12 Correcting Faulty Images

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

12.1 Initial Checkup 12-1
12.1.1 Site Environment 12-1
12.1.2 Checking the Paper 12-1
12.1.3 Checking the Placement of Paper 12-1
12.1.4 Checking the Durables 12-1
12.1.5 Checking the Units and Functional Systems 12-1
12.1.6 Others 12-2
12.2 Outline of Electrical Components 12-3
12.2.1 Clutch/Solenoid/Motor/Fan 12-3
12.2.1.1 List of Clutches/Solenoids/Motors/Fans 12-3
12.2.2 Sensor/Switch 12-4
12.2.2.1 List of Sensors 12-4
12.2.3 Others 12-5
12.2.3.1 List of Lamps, Heaters, and Others 12-5

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

12.1 Initial Checkup

12.1.1 Site Environment

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

a. There must be a source of power whose voltage is as specified (+/-10%). The power plug must never be disconnected day and night.
b. The machine must not be in an area subject to high humidity (near a water faucet, water boiler, humidifier). The site must not be too cold or subject to dust. The machine must not be near a source of fire.
c. The site must not be subject to ammonium gas.
d. The machine must not be exposed to the rays of the sun. As necessary, curtains must be provided.
e. The area must be well ventilated. The machine must be on a level floor.
f. Be sure that there is a source of power that can be used by the machine.

12.1.2 Checking the Paper

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

a. Be sure the paper being used is of a type recommended by Canon.
b. Be sure that the paper is not moist. Try using paper fresh out of package.

12.1.3 Checking the Placement of Paper

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

a. There must be paper in the cassette or the tray deposited within a specific limit.
b. If transparencies are used, be sure that they are placed in the manual feed tray in the correct orientation.

12.1.4 Checking the Durables

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Refer to the table of durables, and replace those that have reached the end of their lives.

12.1.5 Checking the Units and Functional Systems

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

<Reader>
- Check whether the optical system (contact sensor/white panel/copyboard glass) is free from scratches, stain, foreign objects.
- Check whether the contact sensor unit moves smoothly. Check whether the rails are free from dirt.
- Check whether the contact sensor is not flickering.
- Check whether the optical system is free from dew condensation.

<Process>
- Check whether the toner cartridge is installed securely.
- Check whether the photoconductor drum is free from scratches and stain.

<Transfer>
- Check whether the transfer roller is free from scratches, stain, and deformation.

<Fixing>
- Check whether the fixing film and pressure roller are free from wear, scratches, dirt, and deformation.
- Check whether the fixing thermistor is broken.
- Check whether the thermo switch is conductive.

<Paper transport >
- Check whether the paper transport path is free from foreign objects such as paper chips.
- Check whether the paper pickup, feed, and separation rollers are free from paper dust. Also check whether these rollers are free from wear, scratches, dirt, and deformation.
- Check whether the registration roller and paper path are free from wear, scratches, dirt, and deformation.
- Check whether the transport guide is free from wear, scratches, dirt, and deformation.
- Check whether the leading edge of paper is not folded, curled, wavy, or damp.
- Check whether use of the Canon-recommended paper/transparency solves the problem.

<Machine>
- Check whether the drive system load is heavy.
- Check whether gears are worn or cracked?

<Cassette>
- Check whether the cassette is installed properly. Check whether the paper size is set properly. Check whether the same symptom occurs when the cassette is replaced with the cassette verified to be normal.
- Check whether the middle plate of the cassette moves smoothly. Check whether it is deformed.
- Check whether the side and rear alignment plates are adjusted properly.
- Check whether the cassette heater switch is turned on (when a cassette heater is installed).

<Service Mode>
- Check whether various adjustment values are the same as those printed on the service label.
- Check whether the output between CIS channels has been corrected.
(Service mode>TEST MODE>"2"(SCANTEST)>"1")
- Check whether the read position has been adjusted properly. (Stream reading: Only when the ADF is installed)
(Service mode>TEST MODE>"2"(SCANTEST)>"3"(SHEET POS ADJ))
- Check whether the error has been cleared.
(Service mode>CLEAR>ERR)

<General>
- Check whether the power cord is plugged in the outlet securely.
- Check whether the specified AC voltage is applied to the outlet.
- Check whether sensors, clutches, motors, and solenoids are operating normally. Check whether connectors are connected properly.
(Check the power supply and signal routes with reference to the general circuit diagram.)
- Check whether all cables are routed properly and all screws are not loose.
- Check whether all outer covers are attached.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

- Check whether the main power switch and the power switch on the operation pane are turned on.
- Check the power cables and signal cables of options are connected properly.
- Check whether no fuse on PCBs is blown.
- Check whether the user uses the machine properly.

12.1.6 Others

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

If a machine is brought from a cold to warm room, its inside can start to develop condensation, leading to various problems.
a. condensation on the BD sensor is likely to cause problems associated with E100
b. condensation on the dust-proof glass is likely to cause poor image density in sub scanning direction
c. condensation on the contact sensor of the reader unit or on the copyboard glass can cause light images
d. condensation on the pickup or feed guide can cause paper feed problems

If the problem given in d. above has occurred, dry wipe the units in the feed system. Do not open the package containing a toner cartridge right after it has been brought in from a cold to warm place to avoid condensation. Be sure to leave it alone for a while (1 to 2 hr), opening it after it has become fully used to the temperature of the site.

12.2 Outline of Electrical Components

12.2.1 Clutch/Solenoid/Motor/Fan

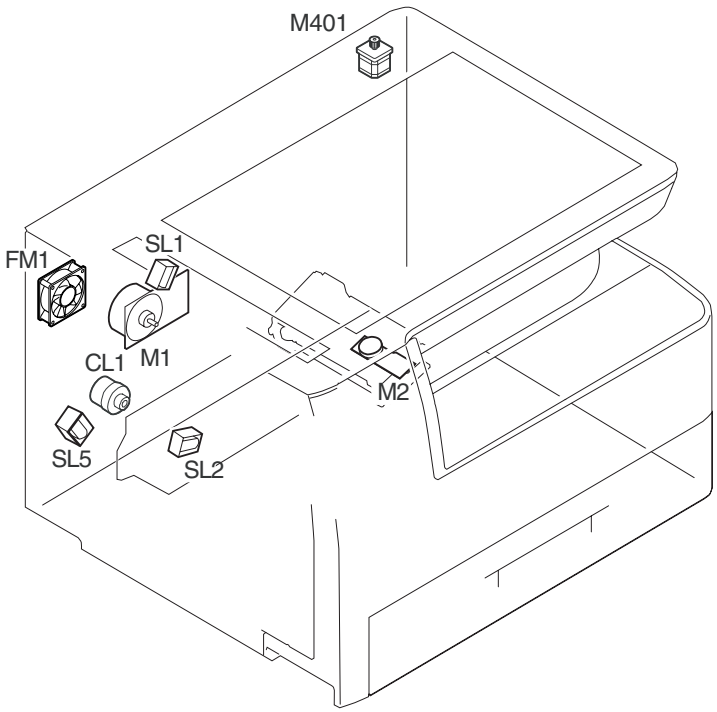
12.2.1.1 List of Clutches/Solenoids/Motors/Fans

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

<Main body>

T-12-1

Symbol	Name	Function	Part No.	Connection jack No.	Error
CL1	Registration clutch	Drives the registration roller.	FK2-1401	J205 (Relay PCB)	
SL1	Duplex pickup solenoid	Drives the duplex pickup roller.	FK2-1409	J204 (Relay PCB)	
SL2	Cassette pickup solenoid	Drives the cassette pickup roller.	FK2-1413	J207 (Relay PCB)	
SL5	Manual pickup solenoid	Drives the manual pickup roller.	FK2-1411	J203 (Relay PCB)	
M1	Main motor	Supplies a drive to each rollers.	FK2-1413	J110 (DC controller PCB)	E010
M2	Polygon motor	Drives the laser scanner.	FM2-5271	J105 (DC controller PCB)	
M401	Reader motor	Drives the contact sensor.	FK2-1383	J410 (Analog processor PCB)	
FM1	Heat discharge fan	Cools fixing unit.	FK2-1386	J206 (Relay PCB)	E805

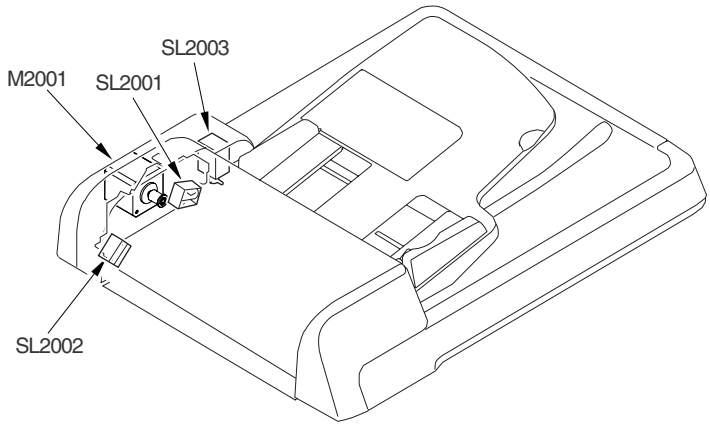


F-12-1

<ADF>

T-12-2

Symbol	Name	Function	Part No.	Connection jack No.	Error
SL2001	Pikup solenoid	Drives the pickup roller.	FK2-1393	J411 (Analog processor PCB)	
SL2002	Registaration solenoid	Drives the registration roller.	FK2-1393	J411 (Analog processor PCB)	
SL2003	Roller release solenoid	Releases the delivery roller.	FK2-1392	J411 (Analog processor PCB)	
M2001	ADF motor	Supplies a drive to each rollers.	FK2-1384	J400Analog processor PCB)	



F-12-2

12.2.2 Sensor/Switch

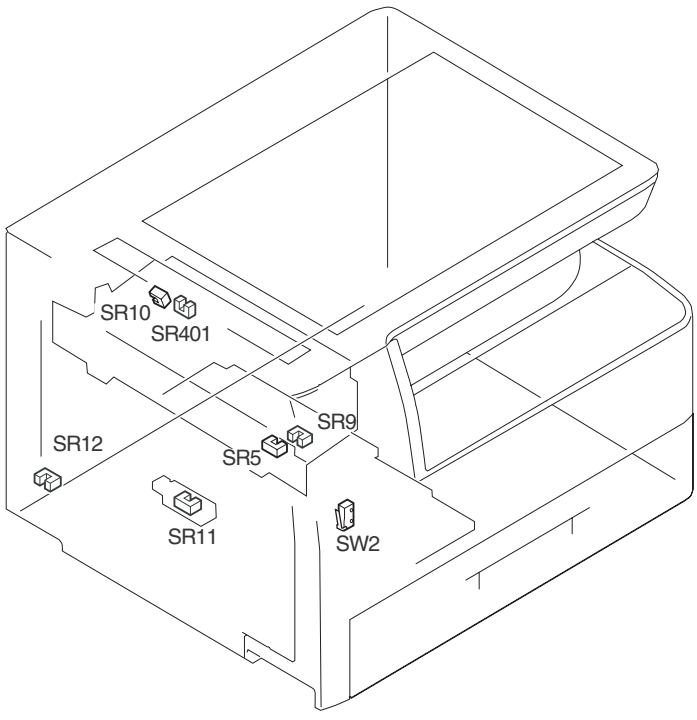
12.2.2.1 List of Sensors

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

<Main body>

T-12-3

Symbol	Name	Function	Part No.	Connection jack No.	Jam code
SR401	CS HP sensor	Detects the CS home position.	WG8-5776	J412 (Analog processor PCB)	
SR5	Delivery sensor	Detects delivery.	WG8-5776	J107 (DC controller PCB)	010c, 0210, 0214
SR9	Cassette paper sensor	Detects presence/absence of cassette paper.	WG8-5776	J208 (Relay PCB)	
SR10	Delivery full sensor	Detects the delivery paper full status.	WG8-5776	J208 (Relay PCB)	
SR11	Registration sensor	Detects registration paper.	WG8-5776	J202 (Relay PCB)	0104, 0208, 0214
SR12	Manual feed paper sensor	Detects presence/absence of manually fed paper.	WG8-5776	J202 (Relay PCB)	
SW2	Interlock switch	Detects opening/closing of the left cover.	WC4-5236	J112 (DC controller PCB)	1118



F-12-3

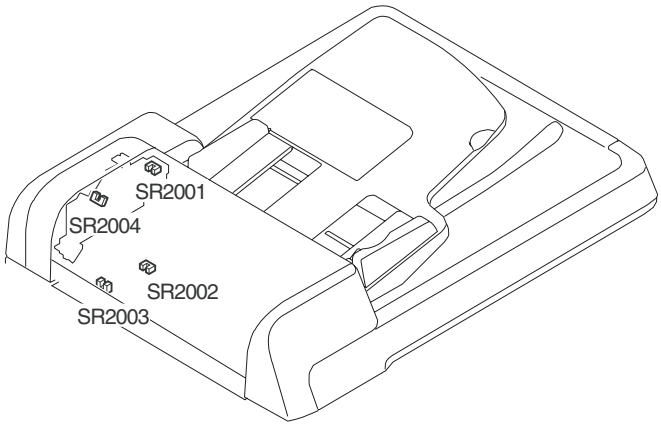
<ADF>

T-12-4

Symbol	Name	Function	Part No.	Connection jack No.	Error
SR2001	Document set sensor	Detects presence/absence of paper.	WG8-5696	J406 (Analog processor PCB)	000a
SR2002	Document edge sensor	Detects edge of paper.	WG8-5696	J406 (Analog processor PCB)	0007, 0008, 0009

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Symbol	Name	Function	Part No.	Connection jack No.	Error
SR2003	Registration sensor	Detects registration paper.	WG8-5696	J406 (Analog processor PCB)	0007, 0010
SR2004	Separation rear sensor	Detects paper after separation.	WG8-5696	J406 (Analog processor PCB)	0007



F-12-4

12.2.3 Others

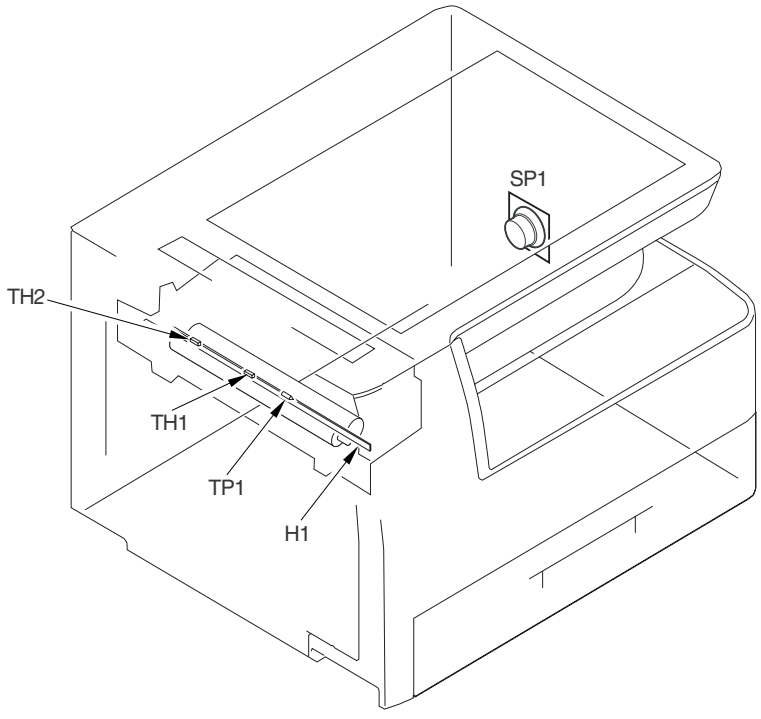
12.2.3.1 List of Lamps, Heaters, and Others

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

<Main body>

T-12-5

Symbol	Name	Function	Parts No.	Connection Jack No.	Error
H1	Fixing heater	Used as the heater for fixing.	Fixing unit (100V:FM2-5297, 120V:FM2-5278, 230V:FM2-5298)	J15 (power supply PCB)	E000, E001, E002, E003
TH1	Fixing main thermistor	Detects the fixing heater temperature.	Fixing unit (100V:FM2-5297, 120V:FM2-5278, 230V:FM2-5298)		
TH2	Fixing sub thermistor	Detects the fixing heater temperature.	Fixing unit (100V:FM2-5297, 120V:FM2-5278, 230V:FM2-5298)		
TP1	Temperature fuse	Cuts off the heater power supply line when an abnormal temperature is detected.	Fixing unit (100V:FM2-5297, 120V:FM2-5278, 230V:FM2-5298)	J15 (power supply PCB)	
SP1	Speaker	Speaker	FK2-1378	J1203 (modem PCB)	



F-12-5

<ADF>

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

There are no parts applicable to ADF.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 13 Error Code

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

13.1 Error Code 13-1
13.1.1 List of Error Codes 13-1
13.2 Jam Code 13-2
13.2.1 Jam Codes (Main body) 13-2
13.2.2 Jam Codes (ADF) 13-2
13.3 Fax Error Codes 13-2
13.3.1 Outline 13-2
13.3.1.1 Error Code Outline 13-2
13.3.2 User Error Code 13-2
13.3.2.1 User Error Code 13-2
13.3.3 Service Error Code 13-3
13.3.3.1 Service Error Code 13-3

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

13.1 Error Code

13.1.1 List of Error Codes

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-13-1

Display Code	Detail Code	Main Cause/Symptom	Countermeasure
E000	0000	Startup error	
		The temperature detected by the main or sub thermistor does not rise to the specified value during startup control.	- Check the fixing film connector. - Replace the fixing film unit. - Replace the DC controller PCB.
E001	0000	Abnormally high temperature (detected by main thermistor)	
		The main thermistor detected an abnormally high temperature (235 deg C) during temperature control.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
	0001	Abnormally high temperature (detected by sub thermistor)	
		The sub thermistor detected an abnormally high temperature (300 deg C) during temperature control.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
E002	0000	Low temperature during temperature control.	
		The target temperature is not reached during temperature control.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
E003	0000	Abnormally low temperature (detected by main thermistor)	
		After the temperature detected by the main thermistor has reached the specified value, it does not reach the specified value during initial rotation.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
	0001	Abnormally low temperature (detected by sub thermistor)	
		After the temperature detected by the sub thermistor has reached the specified value, it does not reach the specified value during initial rotation.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the DC controller PCB.
E010	0000	Main motor failure	
		The main motor is faulty.	- Check the connector of the main motor. - Replace the main motor. - Replace the DC controller PCB.
E100	0000	BD detection PCB failure	
		The BD detection PCB is faulty.	- Check the connector of the BD detection PCB. - Replace the laser scanner unit. - Replace the DC controller PCB.
E197	0000	Printer engine communication error	
		Erroneous communication between the DC controller PCB and image processor PCB was detected.	- Check the connectors of the DC controller PCB and image processor PCB. - Replace the DC controller PCB for normal connection. - Replace the image processor PCB.
E716	0000	Erroneous communication with optional cassette	
		Disconnection of the optional cassette was detected after power-on, detection of normal connection to the optional cassette, and start of communication.	- Check the connectors of the optional cassette PCB and DC controller PCB. - Replace the optional cassette PCB for normal connection. - Replace the DC controller PCB.
E733	0000	Erroneous communication between controller and printer	
		Cannot communicate with the printer at startup.	- Check the connectors of the DC controller PCB and image processor PCB for normal connection. - Check the power supply of the printer (Check whether initialization is performed at startup). - Replace the DC controller PCB or image processor PCB.
E736	0000	CCU communication error	
		The installed modem PCB is incompatible.	- Check the connectors of the image processor PCB and modem. - Replace the modem PCB. - Replace the image processor PCB.
E739	0000	Erroneous communication between controller and network board	
		The installed network board is incompatible.	- Check the connectors of the image processor PCB and LAN PCB for normal connection. - Replace the LAN PCB. - Replace the image processor PCB.
E805	0000	Fan failure	
		The fan is faulty.	- Check the fan connector. - Replace the fan. - Replace the DC controller PCB.
E808	0000	Fixing drive circuit failure	
		- The heater does not turn on. - A fixing drive motor failure was detected.	- Check the connector of the fixing film unit. - Replace the fixing film unit. - Replace the fixing drive motor. - Replace the DC controller PCB. - Replace the power supply PCB.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

13.2 Jam Code

13.2.1 Jam Codes (Main body)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-13-2

Code	Name	Sensor No.	Description
0104	Delay jam in paper pickup section	SR11	The registration sensor cannot detect the leading edge of paper from the moment paper pickup starts to the moment the jam detection time is reached.
0208	Stationary jam in paper pickup section	SR11	The registration sensor cannot detect the no paper status specified time before the leading edge of the picked up paper reaches this sensor.
010c	Delay jam in deliver section	SR5	- The delivery sensor cannot detect presence of paper within the specified time after turning on of the registration clutch. - The delivery sensor detected absence of paper within the specified time after the sensor had detected presence of paper within the specified time after turning on of the registration clutch.
0210	Stationary jam in delivery section	SR5	- The delivery sensor cannot detect absence of paper within the specified time after turning off of the registration clutch. - The delivery sensor cannot detect absence of paper within the specified time after the sensor detected the leading edge of paper.
0214	Stationary jam in machine	SR5, SR9	Paper was detected in the paper transport path during initial rotation, during automatic delivery, at the end of cleaning, or at reception of an emergency stop command.
1118	Door open jam	SW2, SR5, SR9, SR11	The door was opened when there was printing paper in the transport path.

13.2.2 Jam Codes (ADF)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-13-3

Code	Name	Sensor No.	Description
0000	Unknown jam	-	Other errors
0007	Initial stationary	SR2002, SR2003, SR2004	Paper is detected in the transport path before the DADF starts initial operation.
0008	Document edge sensor delay	SR2002	The document edge sensor does not detect paper when the paper has been fed by the predetermined distance since reception of a pickup request.
0009	Document edge sensor stationary	SR2002	The trailing edge of paper is not detected when the paper has been fed by the predetermined distance since detection of it by the document edge sensor.
000a	Paper absence (Pull out the document.)	SR2001	The Document set sensor has been held off since start of pickup.
0010	Pickup NG	SR2003	The registration sensor has been held off since paper pickup started.

13.3 Fax Error Codes

13.3.1 Outline

13.3.1.1 Error Code Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

An error code is used to indicate a fault in a machine, and is indicated in the machine's LCD or reports, showing the nature (symptoms) of the fault. Using the error code, the user or the service man can readily find out how to correct the fault by simply referring to the User's Manual or service manual.
An error code may be either of the following two types:

User Error Codes
A fault indicated as a user error code is one that can easily be corrected by the user, as by operating the machine. It takes the form of "#+number."

Service Error Codes
If a fault calls for a service man for correction, it is indicated as a service man error code in the form of "##+number" or "SYSTEM ERROR E+number."

Memo
A service error code expressed in the form of "##+number" will not appear on the LCD, Error Tx Report, or Activity Report while the machine remains in factory default state. To check a service error code, shift bit 0 of service soft switch #1 SSSW SW01 to '1'.

Memo
Display only the error codes which are newly incorporated in this machine as well as which require remedies unique to the product. For the causes and countermeasures of other error codes, refer to the separate G3/G4 Facsimile Error Code List (Rev. 2).

13.3.2 User Error Code

13.3.2.1 User Error Code

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-13-4

No.	Tx/Rx	Description
#0001	[Tx]	an original has jammed.
#0003	[Tx/Rx]	tine-out for copying or sending/receiving a single page has occurred.
#0005	[Tx/Rx]	time-out for initial identification (T0/T1) has occurred.
#0009	[Rx]	recording paper has jammed or is absent.
#0012	[Tx]	recording paper is absent at the other party.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

No.	Tx/Rx	Description
#0018	[Tx/Rx]	auto call initiation has failed.
#0037	[Rx]	image memory overflow at time of reception has occurred.
#0059	[Tx]	The number you dial and connected number (CSI) does not match.
#0995/0099	[Tx/Rx]	a memory communication reservation has been cancelled.

13.3.3 Service Error Code

13.3.3.1 Service Error Code

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-13-5

No.	Tx/Rx	Description
##0100	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0101	[Tx/Rx]	the modem speed does not match that of the other party.
##0102	[Tx]	at time of transmission, fall-back cannot be used.
##0103	[Rx]	at time of reception, EOL cannot be detected for 5 sec (15 sec if CBT).
##0104	[Tx]	at time of transmission, RTN or PIN is received.
##0106	[Rx]	at time of reception, the procedural signal is received for 6 sec while in wait for the signal.
##0107	[Rx]	at time of reception, the transmitting party cannot use fall-back.
##0109	[Tx]	at time of transmission, a signal other than DIS, DTC, FTT, CFR, or CRP is received, and the procedural signal has been sent more than specified.
##0111	[Tx/Rx]	memory error has occurred.
##0114	[Rx]	at time of reception, RTN is transmitted.
##0200	[Rx]	at time of reception, no image carrier is detected for 5 sec.
##0201	[Tx/Rx]	DCN is received outside the normal parity procedure.
##0220	[Tx/Rx]	system error (main program out of control) has occurred.
##0232	[Tx]	encoding error has occurred.
##0237	[Rx]	decoding error has occurred.
##0261	[Tx/Rx]	system error has occurred.
##0280	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0281	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0282	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0283	[Tx]	at time of transmission, the procedural signal has been transmitted more than specified.
##0284	[Tx]	at time of transmission, DCN is received after transmission of TCF.
##0285	[Tx]	at time of transmission, DCN is received after transmission of EOP.
##0286	[Tx]	at time of transmission, DCN is received after transmission of EOM.
##0287	[Tx]	at time of transmission DCN is received after transmission of MPS.
##0288	[Tx]	after transmission of EOP, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.
##0289	[Tx]	after transmission of EOM, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.
##0290	[Tx]	after transmission of MPS, a signal other than PIN, PIP, MCF, RTP, or RTN has been received.
##0670	[Tx]	at time of V.8 late start, the V.8 ability of DIS front the receiving party is expected to be detected, and the CI signal is expected to be transmitted in response; however, the procedure fails to advance, and the line is released because of T1 time-out.
##0671	[Rx]	at time of V.8 arrival, procedure fails to move to phase 2 after detection of CM signal from caller, causing T1 time-out and releasing line
##0672	[Tx]	at time of V.34 transmission, a shift in procedure from phase 2 to phase 3 and thereafter stops, causing the machine to release the line and suffer T1 timeout.
##0673	[Rx]	at time of V.34 reception, a shift in procedure from phase 2 to phase 3 and thereafter stops, causing the machine to release the line and suffer T1 timeout.
##0674	[Tx]	at time of V.34 transmission, a shift in procedure from phase 3 and phase 4 to the control channel and thereafter stops, causing the machine to release the line and suffer T1 timeout.
##0675	[Rx]	at time of V.34 reception, a shift in procedure from phase 3 and phase 4 to the control channel and thereafter stops, causing the machine to release the line and suffer T1 timeout.
##0750	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of PPS-NULL, causing the procedural signal to be transmitted more than specified.
##0752	[Tx]	at time of ECM transmission, DCN is received after transmission of PPS-NULL.
##0753	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-NULL, or T5 time-out (60 sec) has occurred.
##0754	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-NULL.
##0755	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of PPS-MPS, causing the procedural signal to be transmitted more than specified.
##0757	[Tx]	at time of ECM transmission, DCN is received after retransmission of PPS-MPS.
##0758	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS, or T5 time-out (60 sec) has occurred.
##0759	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS.
##0760	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of PPS-EOM, causing the procedural signal to be transmitted more than specified.
##0762	[Tx]	at time of ECM transmission, DCN is received after transmission of PPS-EOM.
##0763	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-MPS, or T5 time-out (60 sec) has occurred.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

No.	Tx/Rx	Description
##0764	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOM.
##0765	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of PPS-EOP, causing the procedural signal to be transmitted more than specified.
##0767	[Tx]	at time of ECM transmission, DCN is received after transmission of PPS-EOP.
##0768	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOP, or T5 time-out (60 sec) has occurred.
##0769	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of PPS-EOP.
##0770	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of EOR-NULL, causing the procedural signal to be transmitted more than specified.
##0772	[Tx]	at time of ECM transmission, DCN is received after transmission of EOR-NULL.
##0773	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-NULL, or T5 time-out (60 sec) has occurred.
##0774	[Tx]	at time of ECM transmission, ERR is received after transmission of EOR-NULL.
##0775	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of EOR-MPS, causing the procedural signal to be transmitted more than specified.
##0777	[Tx]	at time of ECM transmission, DCN is received after transmission of EOR-MPS.
##0778	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission EOR-MPS, or T5 time-out (60 sec) has occurred.
##0779	[Tx]	at time of ECM transmission, ERR is received after transmission of EOR-MPS.
##0780	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of EOR-EOM, causing the procedural signal to be transmitted more than specified.
##0782	[Tx]	at time of ECM transmission, DCN is received after transmission of EOR-EOM.
##0783	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-EOM, or T5 time-out (60 sec) has occurred.
##0784	[Tx]	at time of ECM transmission, ERR is received after transmission of EOR-EOM.
##0785	[Tx]	at time of ECM transmission, no meaningful signal is received after transmission of EOR-EOP, causing the procedural signal to be transmitted more than specified.
##0787	[Tx]	at time of ECM transmission, DCN is received after transmission of EOR-EOP.
##0788	[Tx]	at time of ECM transmission, the procedural signal has been transmitted more than specified after transmission of EOR-EOP, or T5 time-out (60 sec) has occurred.
##0789	[Tx]	at time of ECM transmission, ERR is received after transmission of EOR-EOP.
##0790	[Rx]	at time of ECM reception, ERR is transmitted after transmission of EOR-Q.
##0791	[Tx/Rx]	while ECM mode procedure is under way, a signal other than a meaningful signal is received.
##0792	[Rx]	at time of ECM reception, PPS-NULL cannot be detected over partial page processing.
##0793	[Rx]	at time of ECM reception, no effective frame is received while high-speed signal reception is under way, thus causing time-out.
##0794	[Tx]	at time of ECM reception, PPR with all 0s is received.
##0795	[Tx/Rx]	a fault has occurred in code processing for communication.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 14 Service Mode

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

14.1 Service Soft Switch Settings (SSSW) 14-1
14.1.1 SSSW-SW01: 14-1
14.1.1.1 List of Functions 14-1
14.1.1.2 Detailed Discussions of Bit 0 14-1
14.1.2 SSSW-SW03 14-1
14.1.2.1 List of Functions 14-1
14.1.2.2 Detailed Discussions of Bit 7 14-1
14.1.3 SSSW-SW04 14-1
14.1.3.1 List of Functions 14-1
14.1.3.2 Detailed Discussions of Bit 2 14-1
14.1.3.3 Detailed Discussions of Bit 3 14-2
14.1.3.4 Detailed Discussions of Bit 4 14-2
14.1.3.5 Detailed Discussions of Bit 6 14-2
14.1.3.6 Detailed Discussions of Bit 7 14-2
14.1.4 SSSW-SW05 14-2
14.1.4.1 List of Functions 14-2
14.1.4.2 Detailed Discussions of Bit 1 14-2
14.1.4.3 Detailed Discussions of Bit 2 14-2
14.1.5 SSSW-SW12 14-2
14.1.5.1 List of Functions 14-2
14.1.6 SSSW-SW13 14-3
14.1.6.1 List of Functions 14-3
14.1.6.2 Detailed Discussions of Bit 2 14-3
14.1.7 SSSW-SW14 14-3
14.1.7.1 List of Functions 14-3
14.1.7.2 Detailed Discussions of Bit 2 14-4
14.1.7.3 Detailed Discussions of Bit 4 14-4
14.1.8 SSSW-SW28 14-4
14.1.8.1 List of Functions 14-4
14.1.8.2 Detailed Discussions of Bit 0 14-4
14.1.8.3 Detailed Discussions of Bit 1 14-4
14.1.8.4 Detailed Discussions of Bit 2 14-4
14.1.8.5 Detailed Discussions of Bit 3 14-4
14.1.8.6 Detailed Discussions of Bit 4 14-4
14.1.8.7 Detailed Discussions of Bit 5 14-4
14.1.9 SSSW-SW30 14-4
14.1.9.1 List of Functions 14-4
14.1.9.2 Detailed Discussions of Bit 5 14-5
14.2 Menu Switch Settings (MENU) 14-5
14.2.1 Menu Switch Composition 14-5
14.2.2 <No.005 NL equalizer> 14-5
14.2.3 <No.006 telephone line monitor> 14-5
14.2.4 <No.007 ATT transmission level> 14-5
14.2.5 <No.008 V.34 modulation speed upper limit> 14-5
14.2.6 <No.009 V.34 data speed upper limit> 14-5
14.2.7 <No.010 Frequency of the pseudo CI signal> 14-5
14.3 Numeric Parameter Settings (NUMERIC Param.) 14-6
14.3.1 <No.010 Frequency of the pseudo CI signal> 14-6
14.3.2 <002: RTN transmission condition (1)><003: RTN transmission condition (2)><004: RTN transmission condition (3)> 14-6
14.3.3 <005: NCC pause length (pre-ID code)> 14-6
14.3.4 <006: NCC pause length (post-ID code)> 14-6
14.3.5 <010: line connection identification length> 14-6
14.3.6 <011: T.30 T1 timer (for reception)> 14-7

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.3.7 <013: T.30 EOL timer> 14-7
14.3.8 <016: time length to first response at time of fax/tel switchover> 14-7
14.3.9 <017: pseudo RBT signal pattern ON time length><018: pseudo RBT signal pattern OFF time length (short)><019: pseudo RBT signal pattern OFF time length (long)> 14-7
14.3.10 <020: pseudo CI signal pattern ON time length><021: pseudo CI signal pattern OFF time length (short)><022: pseudo CI signal pattern OFF time length (long)> 14-7
14.3.11 <023: CNG detention level for fax/tel switchover> 14-7
14.3.12 <024: pseudo RBT transmission level at time of fax/tel switchover> 14-7
14.3.13 <025: Answering machine connection function signal detection time> 14-7
14.3.14 <027: V.21 low-speed flag preamble identification length> 14-7
14.4 Scanner Function Settings (SCANNER) 14-7
14.4.1 Numeric Parameter Functional configuration 14-7
14.4.2 <024:CIS scan position during ADF scanning> 14-8
14.4.3 <026:Distance from the standby position of CIS to the shading start point> 14-8
14.4.4 <031Vertical scan start position adjustment> 14-8
14.4.5 <032Horizontal scan start position adjustment> 14-8
14.4.6 <033Vertical scan magnification correction> 14-8
14.4.7 <034Horizontal scan magnification correction> 14-8
14.4.8 <035: - 036:Reader motor speed change> 14-8
14.4.9 <041: Vertical scan start position adjustment (when scanning on a document fed from ADF)> 14-8
14.4.10 <042: Horizontal scan start position adjustment (when scanning on a document fed from ADF)> 14-9
14.4.11 <043: Horizontal scan end position correction ((copy:scanning on ADF)> 14-9
14.4.12 <044: Horizontal scan end position correction (superfine:scanning on ADF)> 14-9
14.4.13 <045: Horizontal scan end position correction (fine:scanning on ADF)> 14-9
14.4.14 <046: Horizontal scan end position correction (standard:scanning on ADF)> 14-9
14.4.15 <047: Vertical scan magnification correction (when scanning on a document fed from ADF)> 14-9
14.4.16 <048: Horizontal scan magnification correction (when scanning on a document fed from ADF)> 14-9
14.4.17 <054: Pickup motor speed correction (when the ADF is used) > 14-9
14.4.18 <193: ADF special standard-sized paper: LGL misidentification-ready> 14-9
14.4.19 <194: ADF special standard-sized paper: LTR misidentification-ready> 14-9
14.4.20 <195: ADF special standard-sized paper: LTR_R misidentification-ready> 14-9
14.5 Printer Function Settings (PRINTER) 14-10
14.5.1 Service Soft Switch Settings (SSSW) 14-10
14.5.1.1 SSSW-SW05 14-10
14.5.1.1.1 List of Functions 14-10
14.5.1.1.2 Detailed Discussions of Bit 7 14-10
14.5.1.2 SSSW-SW14 14-10
14.5.1.2.1 List of Functions 14-10
14.5.1.2.2 Detailed Discussions of Bit 0 14-10
14.5.1.2.3 Detailed Discussions of Bit 2 14-10
14.5.1.2.4 Detailed Discussions of Bit 4 14-10
14.5.1.2.5 Detailed Discussions of Bit 5 14-11
14.5.1.2.6 Detailed Discussions of Bit 7 14-11
14.5.1.3 SSSW-SW15 14-11
14.5.1.3.1 List of Function 14-11
14.5.1.3.2 Detailed Discussions of Bit 2 14-11
14.5.2 Numeric Parameter Settings (NUMERIC Param.) 14-11
14.5.2.1 Numeric Parameter Functional configuration 14-11
14.5.2.2 <031: Top registration adjustment (manual feed tray)> 14-11
14.5.2.3 <032: Top registration adjustment (cassette)> 14-12
14.5.2.4 <033: Top registration adjustment (duplex unit)> 14-12
14.5.2.5 <034: Left-end registration adjustment (manual feed tray)> 14-12
14.5.2.6 <035: Left-end registration adjustment (cassette 1)> 14-12
14.5.2.7 <036: Left-end registration adjustment (cassette 2)> 14-12
14.5.2.8 <039: Left-end registration adjustment (duplex unit)> 14-12
14.5.2.9 <040: Target fixing temperature adjustment (manual feed tray)> 14-12
14.5.2.10 <041: Target fixing temperature adjustment (cassette 1)> 14-12
14.5.2.11 <042: Target fixing temperature adjustment (cassette 2)> 14-12

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.5.2.12 <053: Margin adjustment at the leading edge of the copy> 14-12
14.5.2.13 <054: Margin adjustment at the trailing edge of the copy> 14-12
14.5.2.14 <055: Margin adjustment at the right edge of the copy> 14-12
14.5.2.15 <056: Margin adjustment at the left edge of the copy> 14-12
14.6 Counter Indication (COUNTER) 14-13
14.6.1 Counters 14-13
14.6.2 Clearing Counters 14-13
14.7 Report Output (REPORT) 14-14
14.7.1 Report Output 14-14
14.7.2 System Data List 14-14
14.7.3 System Dump List 14-14
14.7.4 Counter List 14-16
14.7.5 Error Log List 14-16
14.7.6 Spec List 14-18
14.7.7 Service Label 14-19
14.8 Download (DOWNLOAD) 14-20
14.8.1 Download 14-20
14.9 Data Initialization Mode (CLEAR) 14-20
14.9.1 Clear 14-20
14.10 ROM Management (ROM) 14-20
14.10.1 ROM display 14-20
14.11 Test Mode (TEST) 14-21
14.11.1 Overview 14-21
14.11.1.1 Outline 14-21
14.11.1.2 Test Mode Menu List 14-21
14.11.2 DRAM Test 14-23
14.11.2.1 D-RAM Test<(1) D-RAM TEST> 14-23
14.11.3 Scan Test 14-24
14.11.3.1 Scan Test ((2) SCAN TEST) 14-24
14.11.4 Print Test 14-24
14.11.4.1 Print Test ((3) PRINT TEST) 14-24
14.11.5 Modem Test 14-24
14.11.5.1 MODEM Test ((4) MODEM TEST) 14-24
14.11.6 Faculty Test 14-26
14.11.6.1 FUNCTION TEST <(6) FUNCTION TEST> 14-26
14.11.7 Cleaning Mode 14-30
14.11.7.1 Roller cleaning mode ((0) ROLLER CLEAN) 14-30

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.1 Service Soft Switch Settings (SSSW)

14.1.1 SSSW-SW01:

14.1.1.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-1

Bit	Function	1	0
0	service error code	output	not output
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

14.1.1.2 Detailed Discussions of Bit 0

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Selects whether or not service error codes are output.
When output is selected, service error codes is report.

14.1.2 SSSW-SW03

14.1.2.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-2

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	tonal signal before CED signal transmission	transmit	do not transmit

14.1.2.2 Detailed Discussions of Bit 7

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to enable/disable transmission of a 1080-Hz tonal signal before transmission of the CED signal.
Select 'transmit' if errors occur frequently because of an echo when reception is from overseas.

Memo:
Any of the following error code may be indicated because of an echo at time of reception
##0005, ##0101, ##0106, ##0107, ##0114, ##0200, ##0201, ##0790

14.1.3 SSSW-SW04

14.1.3.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-3

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	the number of final flag sequences of protocol signals	2	1
3	Reception mode after CFR signal transmission	high speed	high speed/low speed
4	the length of the period of ignoring low speed signals after CFR output	1500 ms	700 ms
5	not used	-	-
6	CNG signal for manual transmission	Not transmitted	Transmitted
7	CED signal for manual reception	Not transmitted	Transmitted

14.1.3.2 Detailed Discussions of Bit 2

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to select the number of last flag sequences for a protocol signal (transmission speed at 300 bps). Select '2' if the other party fails to receive the protocol signal properly.

Memo:

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Any of the following error codes may be indicated at time of transmission
##0100, ##0280, ##0281, ##0750, ##0753, ##0754, ##0755, ##0758, ##0759, ##0760, ##0763 ##0764, ##0765, ##0768, ##0769,##0770, ##0773, ##0775, ##0778, ##0780, ##0783, ##0785, ##0788

14.1.3.3 Detailed Discussions of Bit 3

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to select an appropriate reception mode after transmission of the CFR signal.
If errors occur frequently at time of reception because of the condition of the line, select 'high speed' for reception mode and, at the same time, selects 'do not receive' for 'ECM reception.'

Memo:
Any of the following error codes may be indicated at time of reception because of line condition
##0107, ##0114, ##0201
Be sure to change bit 4 before changing this bit; if errors still occur, change this bit.
When 'high speed' is selected, only high-speed signals (images) will be received after transmission of the CFR signal.

14.1.3.4 Detailed Discussions of Bit 4

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to select the time length during which low-speed signals are ignored after transmission of the CFR signal.
If the condition of the line is not good and, therefore, the reception of image signals is difficult, select '1500 ms.'

14.1.3.5 Detailed Discussions of Bit 6

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Selects whether or not to transmit CNG signal during manual transmission.
In manual transmitting to a fax with the FAX/TEL switching mode, if there are frequent errors due to failure to switch to fax mode, select "Transmitted" for the CNG signal.

14.1.3.6 Detailed Discussions of Bit 7

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Selects whether or not to transmit CED signals during manual reception. If the other fax does not transmit even when you start manual reception, select "Transmitted" for the CED signal.

14.1.4 SSSW-SW05

14.1.4.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-4

Bit	Function	1	0
0	not used	-	-
1	Conversion from mm to inch (text mode)	convert	do not convert
2	Conversion from mm to inch (text/photo mode)	convert	do not convert
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

14.1.4.2 Detailed Discussions of Bit 1

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to enable/disable millimeter/inch conversion in sub scanning direction for images read in text mode.
Scanning direction in conversion follows the Bit 2 setting of SW14.

14.1.4.3 Detailed Discussions of Bit 2

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to enable/disable millimeter/inch conversion in sub scanning direction for images read in text/photo mode while bit 1 is set to '1'.
Scanning direction in conversion follows the Bit 2 setting of SW14.

14.1.5 SSSW-SW12

14.1.5.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-5

Bit	Function	1	0
0	Time-out period for one page upon transmission	1	0
1	Time-out period for one page upon transmission	1	0
2	not used	-	-
3	not used	-	-
4	Time-out period for one page upon reception	1	0

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Bit	Function	1	0
5	Time-out period for one page upon reception	1	0
6	not used	-	-
7	Respective page timer settings for transmission and for reception	enable	do not enable

The machine will stop the ongoing communication if the transmission/reception of a single original page takes 32 min or more. To use the timer for a purpose other than this function, refer to the tables that follow, and select an appropriate time length.
When 'do not enable' is selected using bit 7, the time-out length for a single page for all modes will depend on the setting of bit 0 and bit 1.

T-14-6

Time-Out Length for Transmission/Reception	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8 min	0	*	*	*	*	*	0	0
16 min	0	*	*	*	*	*	0	1
32 min	0	*	*	*	*	*	1	0
64 min	0	*	*	*	*	*	1	1

T-14-7

Time-Out Length for Transmission (in text mode)	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8 min	1	*	*	*	*	*	0	0
16 min	1	*	*	*	*	*	0	1
32 min	1	*	*	*	*	*	1	0
64 min	1	*	*	*	*	*	1	1

T-14-8

Time-Out Length for Reception	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
8 min	1	*	0	0	*	*	*	*
16 min	1	*	0	1	*	*	*	*
32 min	1	*	1	0	*	*	*	*
64 min	1	*	1	1	*	*	*	*

14.1.6 SSSW-SW13

14.1.6.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-9

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	Convert "inch" into "mm" when transmitting the received image data	convert	do not convert
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	not used	-	-

14.1.6.2 Detailed Discussions of Bit 2

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

It converts "inch" into "mm" when transmitting the received image data.
Scanning direction in conversion follows the Bit 2 setting of SW14.

14.1.7 SSSW-SW14

14.1.7.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-10

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	direction of scanning for inch/mm conversion	both main and sub scanning directions	sub scanning direction only
3	not used	-	-
4	inch-configuration resolution declaration	declare	do not declare
5	not used	-	-
6	not used	-	-
7	not used	-	-

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.1.7.2 Detailed Discussions of Bit 2

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to specify whether to convert or not convert an inch-configuration resolution into a millimeter-configuration resolution for image read in G3 transmission: either in sub scanning direction only or in both main and sub scanning directions. The setting is valid only when bit 1 of SW05 of #SSSW is set to '1'.

14.1.7.3 Detailed Discussions of Bit 4

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to specify whether to declare or not declare an inch-configuration resolution to the other machine for G3 communication: if 'declare' is selected, the machine will indicate that it reads and records at an inch-configuration resolution using the DIS, DCS, or DTC signal.

14.1.8 SSSW-SW28

14.1.8.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-11

Bit	Function	1	0
0	Caller V.8 protocol	NO	YES
1	Called party V.8 protocol	NO	YES
2	Caller V.8 protocol late start	NO	YES
3	Called party V.8 protocol late start	NO	YES
4	V.34 reception fallback	Prohibited	Not prohibited
5	V.34 transmission fallback	Prohibited	Not prohibited
6	not used	-	-
7	not used	-	-

14.1.8.2 Detailed Discussions of Bit 0

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether to use the V.8 protocol when calling. If NO is selected, the V.8 protocol is inhibited at calling and the V.21 protocol is used.

14.1.8.3 Detailed Discussions of Bit 1

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether to use the V.8 protocol when called. If NO is selected, the V8 protocol is inhibited when called and the V.21 protocol is used.

14.1.8.4 Detailed Discussions of Bit 2

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

If ANSam signal is not received during transmission, select whether to use the V.8 protocol when the other fax machine declares the V.8 protocol in DIS signal. If NO is selected, the CI signal is not transmitted and the V.8 protocol is not used even if the DIS that specifies the V.8 protocol is received.
The V.8 late start is not executed during manual transmission regardless of this setting.

14.1.8.5 Detailed Discussions of Bit 3

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether to declare the V.8 protocol in DIS signal for reception. If NO is selected, the V.8 protocol cannot be used because it is not declared in DIS signal.
The V.8 late start is not executed during manual reception regardless of this setting.

14.1.8.6 Detailed Discussions of Bit 4

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether the receiver falls back during V.34 reception. If 'Prohibit' is selected, the receiver does not fall back.

14.1.8.7 Detailed Discussions of Bit 5

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether the transmitter falls beck during V.34 transmission. If 'Prohibit' is selected, teh transmitter does not fall back.

14.1.9 SSSW-SW30

14.1.9.1 List of Functions

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-12

Bit	Function	1	0
0	Not used	-	-
1	Not used	-	-
2	Not used	-	-
3	Not used	-	-
4	Not used	-	-
5	New dial tone detection method	Detect with the new method.	Detect with the existing method.
6	Not used	-	-

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Bit	Function	1	0
7	Not used	-	-

14.1.9.2 Detailed Discussions of Bit 5

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

When "Detect with the new method" is selected, tone is detected for 3.5 seconds before call origination in order to discriminate between dial tone and voice. If dial tone is detected and the time since line seizure is 3.5 seconds or longer, call origination takes place immediately. If the time since line seizure is less than 3.5 seconds, call origination takes place after waiting for 1 second. (If the time since line seizure reaches 3.5 seconds during the 1-second waiting period, call origination takes place immediately. By default, "Detect with a new method" is assigned for this SW.

14.2 Menu Switch Settings (MENU)

14.2.1 Menu Switch Composition

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-13

No.	Function	Range of settings
005	NL equalizer	1: ON, 0: OFF
006	telephone line monitor	0:DIAL, 1:SERVICEMAN1, 2:SERVICEMAN2, 3:OFF
007	transmission level (ATT)	from 0 to 15 (ex: 15= -15 dBm)
008	V.34 modulation speed upper limit	0:3429, 1:3200, 2:3000, 3:2800, 4:2743, 5:2400
009	V34 data speed upper limit	0:33.6 kbps, 1:31.2 kbps, 2:28.8 kbps, 3:26.4 kbps, 4:24.0 kbps, 5:21.6 kbps, 6:19.2 kbps, 7:16.8 kbps, 8:14.4 kbps, 9:12.0 kbps, 10:9.6 kbps, 11:7.2 kbps, 12:4.8 kbps, 13:2.4 kbps
010	Frequency of pseudoring signal	0:50 Hz, 1:25 Hz, 2:17 Hz

14.2.2 <No.005 NL equalizer>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to enable-disable the NL equalizer.
If errors occur often during communication because of the condition of the line, enable (ON) the NL equalizer.

Any of the following error codes may be indicated at time of transmission because of the line condition:
##100, ##101, ##102, ##104, ##201, ##281, ##282, ##283, ##750, ##755, ##765, ##774, ##779, ##784, ##789
Any of the following error codes may be indicated at time of transmission because of the line condition:
##103, ##107, ##114, ##201, ##790, ##793

14.2.3 <No.006 telephone line monitor>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to s the telephone line monitor function:
DIAL: generate the monitor sound of the telephone line using the speaker from the start of transmission to DIS.
SERVICEMAN [1]: generate the monitor sound of the telephone line using the speaker from the start of communication to the end of it.
SERVICEMAN [2]: generate the monitor sound of the telephone line2 (Option).
OFF: do not generate the monitor sound of the telephone line using the speaker.

14.2.4 <No.007 ATT transmission level>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set the transmission level (ATT).
Raise the transmission level if errors occur frequently at time of communication because of the condition of the line. (It means close to 8)

Any of the following error codes may be indicated at time of transmission because of the line condition:
##100, ##101, ##102, ##104, ##201, ##280, ##281, ##282, ##283, ##284, ##750, ##752, ##754, ##755, ##757, ##759, ##760, ##762, ##764, ##765, ##767, ##769, ##770, ##772, ##774, ##775, ##777, ##779, ##780, ##782, ##784, ##785, ##787, ##789
Any of the following error codes may be indicated at time of reception because of the line condition:
##103, ##106, ##107, ##201, ##793

14.2.5 <No.008 V.34 modulation speed upper limit>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set an upper limit to the modulation speed (baud rate) for the V.34 primary channel.

14.2.6 <No.009 V.34 data speed upper limit>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set an upper limit to the data transmission speed for the V.34 primary channel between 2.4K and 33.6K bps in increments of 2400 bps. (0: 2.4K to 13: 33.6K bps).

14.2.7 <No.010 Frequency of the pseudo CI signal>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

You may select a frequency for the pseudo CI signal.
Some types of external telephones do not ring when the fax/tel switch-over function is ON. To sound the ring, change the pseudo CI signal.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.3 Numeric Parameter Settings (NUMERIC Param.)

14.3.1 <No.010 Frequency of the pseudo CI signal>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-14

No.	Item	Range of settings
002	RTN transmission condition(1)	1% to 99%
003	RTN transmission condition (2)	2 to 99 item
004	RTN transmission condition (3)	1 to 99 lines
005	NCC pause time length (pre-ID code)	1 to 60 sec
006	NCC pause time length (post-ID code)	1 to 60 sec
010	line condition identification time length	0 to 9999 (10 msec)
011	T.30T1 timer (for reception)	0 to 9999 (10 msec)
013	T.30 EOL timer	500 to 3000 (10 msec)
015	hooking detection time length	0 to 999
016	time length to first response at time of fax/tel switchover	0 to 9
017	pseudo RBT signal pattern ON time length	0 to 999
018	pseudo RBT signal pattern OFF time length (short)	0 to 999
019	pseudo RBT signal pattern OFF time length (long)	0 to 999
020	pseudo CI signal pattern ON time length	0 to 999
021	pseudo CI signal pattern OFF time length (short)	0 to 999
022	pseudo CI signal pattern OFF time length (long)	0 to 999
023	CNG detection level at time of fax/tel switchover	0 to 7
024	pseudo RBT transmission level at time of fax/tel switchover	10 to 20 0 to 20 (120/230V)
025	Answering machine connection function signal detection time	0 to 999
027	preamble detection time length for V21 low-speed flag	20 (x 10ms)

14.3.2 <002: RTN transmission condition (1)><003: RTN transmission condition (2)><004: RTN transmission condition (3)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set RTN signal transmission conditions. Raise these parameters for more lenient conditions if errors occur frequently at time of reception because of transmission of the RTN signal.

Memo:
Any of the following error codes may be indicated at time of reception because of RTN signal transmission
##0104, ##0107, ##0114, ##0201

RTN signal transmission condition (1) affects the ratio of error lines to the total number of lines per single page of received images.
RTN signal transmission condition (2) affects the standard value (*2) of burst errors (*1).
RTN signal condition (3) affects the number of errors not reaching the standard value of burst errors.

*1: transmission error occurring cover several lines.
*2: for instance, if '15' is set, a single burst error will represent an error occurring continuously cover 15 lines.

If any of these lines is detected while an image signal is being received, the RTN signal will be transmitted after receiving the protocol signal of the transmitting party. Higher parameters restrict the transmission of the RTN signal.

14.3.3 <005: NCC pause length (pre-ID code)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set the length of the pause automatically entered between access code and ID code when the NCC (New Common Carrier) line is used for dialing.

14.3.4 <006: NCC pause length (post-ID code)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set the length of the pause automatically entered between ID code and telephone number of the other party when the NCC (New Common Carrier) line is used for dialing.

14.3.5 <010: line connection identification length>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set the time for identifying the line connection. Raise this parameter if errors occur frequently at time of communication because of the condition of the line.

Memo:
Any of the following error codes may be indicated because of the condition of the line
##0005, ##0018
The line condition identification time is between when the dial signal is transmitted and when the line condition is cut for the transmitting party, while it is between when the DIS signal is transmitted and when the line is cut for the receiving party.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.3.6 <011: T.30 T1 timer (for reception)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Set the T1 timer for the receiver (wait time after DIS transmission starts until a significant signal is received).

14.3.7 <013: T.30 EOL timer>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Set it so that the 1-line transmission time is longer for reception to prevent reception errors caused by a long data length per line (e.g., computer FAX).

14.3.8 <016: time length to first response at time of fax/tel switchover>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Allows setting of the time from seizing the line till pseudo RBT is sent, when the Fax/ Tel switching function is operating.

14.3.9 <017: pseudo RBT signal pattern ON time length><018: pseudo RBT signal pattern OFF time length (short)><019: pseudo RBT signal pattern OFF time length (long)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set the pattern of the pseudo RBT signal transmitted at time of a fax/tel switchover.

14.3.10 <020: pseudo CI signal pattern ON time length><021: pseudo CI signal pattern OFF time length (short)><022: pseudo CI signal pattern OFF time length (long)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set the pseudo CI signal pattern transmitted at time of a fax/tel switchover.

14.3.11 <023: CNG detention level for fax/tel switchover>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set the CNG detention level for a fax/tel switchover.

14.3.12 <024: pseudo RBT transmission level at time of fax/tel switchover>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to set the pseudo transmission level for a fax/tel switchover.

14.3.13 <025: Answering machine connection function signal detection time>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Sets the signal detection time for the answering machine connection function operation. When the answering machine connection function is operating, if the function does not operate normally because the fax does not detect CNG signal sent from the line, raise this parameter to increase the signal detection time.

14.3.14 <027: V.21 low-speed flag preamble identification length>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to detect the time of detection after which command analysis is started after detecting V.21 low-speed command preambles continuously for a specific period of time.

14.4 Scanner Function Settings (SCANNER)

14.4.1 Numeric Parameter Functional configuration

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

No.	Function	Default	Setting range	Unit
001: - 023:	Not used			
024:	CIS scan position during ADF scanning.	385	300-450	one unit=0.1mm
025:	Not used			
026:	Distance from the standby position of CIS to the shading start point.	22	6-48	one unit=0.1mm
027: - 030:	Not used			
031:	Vertical scan start position adjustment	35	0-70	one unit=0.1mm
032:	Horizontal scan start position adjustment	115	50-150	one unit=0.1mm
033:	Vertical scan magnification correction	32	0-32	one unit=0.1%
034:	Horizontal scan magnification correction	32	0-32	one unit=0.1%
035: - 036:	Reader motor speed adjustment	555		
037: - 040:	Not used			
041:	Vertical scan start position adjustment (scanning on ADF)	35	0-70	one unit=0.1mm
042:	Horizontal scan start position adjustment (scanning on ADF)	219	170-270	one unit=0.1mm
043:	Horizontal scan end position correction (copy:scanning on ADF)	75	0-200	one unit=0.1mm
044:	Horizontal scan end position correction (superfine:scanning on ADF)	75	0-200	one unit=0.1mm

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

No.	Function	Default	Setting range	Unit
045:	Horizontal scan end position correction (fine:scanning on ADF)	75	0-200	one unit=0.1mm
046:	Horizontal scan end position correction (standard:scanning on ADF)	75	0-200	one unit=0.1mm
047:	Vertical scan magnification correction (scanning on ADF)	32	0-32	one unit=0.1%
048:	Horizontal scan magnification correction (scanning on ADF)	32	0-32	one unit=0.1%
049: - 053:	Not used			
054:	Pickup motor speed correction (when the ADF is used)	32	0-32	one unit=0.1%
055: - 192:	Not used			
193:	ADF special paper, standardized size: LGL misidentification-ready	0	0 : LEGAL 1 : FOOLSCAP 2 : M_OFFICIO 3 : A_FOOLSCAP 4 : FOLIO 5 : G_LEGAL 6 : A_OFFICIO 7 : B_OFFICIO	
194:	ADF special paper, standardized size: LTR misidentification-ready	0	0 : LTR 1 : G_LTR 2 : A_LTR	
195:	ADF special paper, standardized size: LTR_R misidentification-ready	0	0 : LTR_R 1 : FOOLSCAP 2 : OFFICIO 3 : E_OFFICIO 4 : G_LTR_R 5 : A_LTR_R	
196: - 350:	Not used			

⚠If any operation error occurs after changing the setting value, change the setting value to the original one.

14.4.2 <024:CIS scan position during ADF scanning>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This value is used when automatic scan position adjustment (TESTMODE>"2"SCAN TEST>"3"SHEET POS ADJ) fails.

14.4.3 <026:Distance from the standby position of CIS to the shading start point>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

White shading can be adjusted finely.

⚠Normally, do not change the setting value. If any operation error occurs after changing the setting value, change the setting value to the original one.

14.4.4 <031Vertical scan start position adjustment>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the position at which vertical scanning of a book starts. The larger the adjustment value, the narrower the left-side margin of the image becomes.

14.4.5 <032Horizontal scan start position adjustment>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the position at which horizontal scanning of a book starts. The larger the adjustment value, the narrower the top margin in the image becomes.

14.4.6 <033Vertical scan magnification correction>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Correct the magnification of vertical scanning of a book. The larger the adjustment value, the more the image stretches in the vertical scanning direction.

14.4.7 <034Horizontal scan magnification correction>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Correct the magnification of horizontal scanning of a book. The larger the adjustment value, the more the image stretches in the horizontal scanning direction.

14.4.8 <035: - 036:Reader motor speed change>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Though no market adjustment work needs to be carried out, enter factory defaults at image processor PCB replacement.

14.4.9 <041: Vertical scan start position adjustment (when scanning on a document fed from ADF)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the position at which vertical scanning of a document fed from the ADF starts. The larger the adjustment value, the narrower the left-side margin of the image becomes.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.4.10 <042: Horizontal scan start position adjustment (when scanning on a document fed from ADF)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the position at which horizontal scanning of a document fed from the ADF starts. The larger the adjustment value, the narrower the top margin of the image becomes.

14.4.11 <043: Horizontal scan end position correction ((copy:scanning on ADF)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the position at which horizontal scanning of a document being copied ends (when scanning on a document fed from ADF). The larger the adjustment value, the narrower the bottom margin of the image becomes.

14.4.12 <044: Horizontal scan end position correction (superfine:scanning on ADF)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the position at which horizontal scanning of a FAX document scanned in superfine mode ends. The larger the adjustment value, the narrower the bottom margin of the image becomes.

14.4.13 <045: Horizontal scan end position correction (fine:scanning on ADF)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the position at which horizontal scanning of a FAX document scanned in fine mode ends. The larger the adjustment value, the narrower the bottom margin of the image becomes.

14.4.14 <046: Horizontal scan end position correction (standard:scanning on ADF)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the position at which horizontal scanning of a FAX document set to the standard scan resolution ends. The larger the adjustment value, the narrower the bottom margin of the image becomes.

14.4.15 <047: Vertical scan magnification correction (when scanning on a document fed from ADF)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Correct the magnification of vertical scanning of a document fed from the ADF. The larger the adjustment value, the more the image stretches in the vertical scanning direction.

14.4.16 <048: Horizontal scan magnification correction (when scanning on a document fed from ADF)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Correct the magnification of horizontal scanning of a document fed from the ADF. The smaller the adjustment value, the more the image ruduces in the horizontal scanning direction.
This menu is used to adjust the ADF feed motor speed. If you changed the adjustment value in this mode, the adjustment value selected for SCAN NUMERIC>54 must also be incremented/decremented by the same amount.

⚠ Do not change the adjustment value extremely.

14.4.17 <054: Pickup motor speed correction (when the ADF is used) >

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This menu is used to adjust the ADF pickup motor speed. If you have adjusted the ADF feed motor speed by selecting SCAN NUMERIC>48, the ADF pickup motor speed must also be incremented/decremented by the same amount.

⚠ Do not change the adjustment value extremely.

14.4.18 <193: ADF special standard-sized paper: LGL misidentification-ready>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LEGAL").
0: LEGAL
1: FOOLSCAP
2: M_OFFICIO
3: A_FOOLSCAP
4: FOLIO
5: G_LEGAL
6: A_OFFICIO
7: B_OFFICIO

14.4.19 <194: ADF special standard-sized paper: LTR misidentification-ready>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LTR").
0: LTR
1: G_LTR
2: A_LTR

14.4.20 <195: ADF special standard-sized paper: LTR_R misidentification-ready>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Set to use special standard-sized paper that is not otherwise identifiable to the ADF (because it is misidentified as "LTRR").
0: LTR_R

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

1: FOOLSCAP
2: OFFICIO
3: E_OFFICIO
4: G_LTR_R
5: A_LTR_R

14.5 Printer Function Settings (PRINTER)

14.5.1 Service Soft Switch Settings (SSSW)

14.5.1.1 SSSW-SW05

14.5.1.1.1 List of Functions

0011-4190

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-15

Bit	Function	1	0
0	not used	-	-
1	not used	-	-
2	not used	-	-
3	not used	-	-
4	not used	-	-
5	not used	-	-
6	not used	-	-
7	priority on recording in sub scanning direction	place	do not place

14.5.1.1.2 Detailed Discussions of Bit 7

0011-4191

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to enable/disable placement of priority on recording in sub scanning direction.

T-14-16

place:	if B4 recording paper and A4 recording paper are set and an A4 extra-long image (*) is received, printing will be on the B4 recording paper.
do not place:	if B5 horizontal recording paper and A4 recording paper are set and a B4 image is received, printing will be by division and on B5 horizontal recording paper.

*: Image B4 or shorter and that cannot be printed by division and on A4 recording paper.

14.5.1.2 SSSW-SW14

14.5.1.2.1 List of Functions

0011-4192

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-17

Bit	Function	1	0
0	Transfer bias pressure reduction mode	Enable	Disable
1	Not used	-	-
2	Black belt addition mode	Enable	Disable
3	Not used	-	-
4	Flicker reduction mode	Enable	Disable
5	Silent mode	Enable	Disable
6	Terminal temperature rise Not used	-	-
7	Pre-rotation extension mode	Enable	Disable

14.5.1.2.2 Detailed Discussions of Bit 0

0011-4193

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether to enable or disable transfer bias pressure reduction mode.
Select "Enable" to avoid image defects (black spots) produced by transfer bias leaks occurring in a low-pressure region, such as one at a high altitude. This setting regulates the transfer bias to keep it from exceeding a predetermined level during printing.

14.5.1.2.3 Detailed Discussions of Bit 2

0011-4194

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether to enable or disable black belt addition mode. If the user uses paper that causes fixed toner on paper to be fused and adhered to drum, selecting "Yes" will clean the drum by forming a black band on the drum surface during the reverse rotation which is performed after printing on 50 sheets.

14.5.1.2.4 Detailed Discussions of Bit 4

0011-4195

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether to enable or disable flicker reduction mode. Select "Enable" and enter a count to modify fusing temperature control to cancel fluorescent flicking

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

during printing.

⚠Implementation of this mode would degrade the throughput.

14.5.1.2.5 Detailed Discussions of Bit 5

0012-7581

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Select whether to enable or disable silent mode. Select "Enable" to modify the registration loop amount and thus reduce noises or squeaks the registration rollers produce after picking paper from the individual paper inlets.

14.5.1.2.6 Detailed Discussions of Bit 7

0012-7584

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

You can specify whether the pre-rotation is to be extended.
If white streaks appear in the image in the H/H environment, selecting "Set" extends the pre-rotation by five turns. During the extended period, the charge Vpp is increased to prevent white streaks from occurring.

14.5.1.3 SSSW-SW15

14.5.1.3.1 List of Function

0011-7100

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

T-14-18

Bit	Function	1	0
0	Not used	-	-
1	Not used	-	-
2	Not used	-	-
3	IFAX Permission of split recording of text data	Enable	Disable
4	Not used	-	-
5	Not used	-	-
6	Not used	-	-
7	Not used	-	-

14.5.1.3.2 Detailed Discussions of Bit 2

0011-7102

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

You can specify whether split recording is to be enabled when text data such as a header and body text is recorded. Selecting "Set" may split text data when a small paper size such as A5 is selected. In this case, a page may be split in the middle of a character string.

14.5.2 Numeric Parameter Settings (NUMERIC Param.)

14.5.2.1 Numeric Parameter Functional configuration

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

No.	Function	Default	Setting range
01: - 30:	Not used		
31:	Top registration adjustment (manual feed tray)	50	0 to 100, one unit = 0.1 mm
32:	Top registration adjustment (cassette)	50	0 to 100, one unit = 0.1 mm
33:	Top registration adjustment (duplex unit)	50	0 to 100, one unit = 0.1 mm
34:	Left-end registration adjustment (manual feed tray)	100	0 to 200, one unit = 0.1 mm
35:	Left-end registration adjustment (cassette)	100	0 to 200, one unit = 0.1 mm
36:	Left-end registration adjustment (option cassette)	100	0 to 200, one unit = 0.1 mm
37: - 38:	Not used		
39:	Left-end registration adjustment (duplex unit)	100	0 to 200, one unit = 0.1 mm
40:	Target fixing temperature adjustment (multi)	6	0 to 4, one unit = 5 deg C
41:	Target fixing temperature adjustment (cassette)	6	0 to 4, one unit = 5 deg C
42:	Target fixing temperature adjustment (option cassette)	6	0 to 4, one unit = 5 deg C
43: - 50:	Not used		
51:	Two-sided curl reform mode	3	0 to 6
52:	Not used		
53:	Adjustment of margin at leading edge of copy	0	0 to 9999, one unit = 5 deg C
54:	Adjustment of margin at trailing edge of copy	50	0 to 9999, one unit = 5 deg C
55:	Adjustment of margin at right edge of copy	0	0 to 9999, one unit = 5 deg C
56:	Adjustment of margin at left edge of copy	0	0 to 9999, one unit = 5 deg C

14.5.2.2 <031: Top registration adjustment (manual feed tray)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the top registration margin of paper picked from a manual feed tray. The larger the adjustment value, the wider the top margin of the image becomes.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.5.2.3 <032: Top registration adjustment (cassette)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the top registration margin of paper picked from cassettes. The larger the adjustment value, the wider the top margin of the image becomes.

14.5.2.4 <033: Top registration adjustment (duplex unit)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the top registration margin of paper picked from a duplex unit. The larger the adjustment value, the wider the top margin of the image becomes.

14.5.2.5 <034: Left-end registration adjustment (manual feed tray)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the left-end registration margin of paper picked from a manual feed tray. The larger the adjustment value, the wider the left-end margin of the image becomes.

14.5.2.6 <035: Left-end registration adjustment (cassette 1)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the left-end registration margin of paper picked from cassette 1. The larger the adjustment value, the wider the left-end margin of the image becomes.

14.5.2.7 <036: Left-end registration adjustment (cassette 2)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the left-end registration margin of paper picked from cassette 2. The larger the adjustment value, the wider the left-end margin of the image becomes.

14.5.2.8 <039: Left-end registration adjustment (duplex unit)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the left-end registration margin of paper picked from a duplex unit. The larger the adjustment value, the wider the left-end margin of the image becomes.

14.5.2.9 <040: Target fixing temperature adjustment (manual feed tray)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Lower the fixing temperature from the target temperature setting to reduce the chances of fixing offsets and curled or stuck delivered sheets occurring with paper picked from a manual feed tray.

14.5.2.10 <041: Target fixing temperature adjustment (cassette 1)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Lower the fixing temperature from the target temperature setting to reduce the chances of fixing offsets and curled or stuck delivered sheets occurring with paper picked from cassette 1.

14.5.2.11 <042: Target fixing temperature adjustment (cassette 2)>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Lower the fixing temperature from the target temperature setting to reduce the chances of fixing offsets and curled or stuck delivered sheets occurring with paper picked from cassette 2.

14.5.2.12 <053: Margin adjustment at the leading edge of the copy>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the margin at the leading edge of the copy. Increasing the value makes the margin at the leading edge larger.

14.5.2.13 <054: Margin adjustment at the trailing edge of the copy>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the margin at the trailing edge of the copy. Increasing the value makes the margin at the trailing edge larger.

14.5.2.14 <055: Margin adjustment at the right edge of the copy>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the margin at the right edge of the copy. Increasing the value makes the margin at the right edge larger.

14.5.2.15 <056: Margin adjustment at the left edge of the copy>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Adjust the margin at the left edge of the copy. Increasing the value makes the margin at the left edge larger.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.6 Counter Indication (COUNTER)

14.6.1 Counters

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This copier is furnished with a maintenance/supplies counter set (DRBL-1), which can be used to gain rough measures of when to replace supplies. The counter set increments by one on counting each sheet of small-sized paper (up to A4/LTR) and by two on counting each sheet of large-sized paper (larger than A4/LTR).

T-14-19

Maintenance counter list		
Item	**Counter**	**Explanation**
TOTAL (Total counter)	SERVICE1	Service total counter 1
	SERVICE2	Service total counter 2
	TTL	Total counter
	COPY	Total copy counter
	PDL-PRT	PDL print counter
	FAX-PRT	Fax print counter
	REP-PRT	Report print counter
	2-SIDE	Double-sided copy/print counter
	SCAN	Scan counter
PICK-UP (Paper pickup counter)	C1	Cassette 1 jam counter
	C2	Cassette 2 jam counter
	C3	Cassette 3 jam counter
	C4	Cassette 4 jam counter
	MF	Manual feed tray pickup total counter
	2-SIDE	Double-sided paper pickup total counter
FEEDER (Feeder related counters)	FEED	Feeder pickup total counter
	DFOP-CNT	ADF open/close hinge counter
JAM (Jam counters)	TTL	Unit total jam count
	FEEDER	Feeder total jam count
	SORTER	Finisher total jam count
	2-SIDE	Duplex unit jam counter
	MF	Manual feed tray jam counter
	C1	Cassette 1 jam counter
	C2	Cassette 2 jam counter
	C3	Cassette 3 jam counter
	C4	Cassette 4 jam counter
MISC (Other required counter)	WST-TNR	Waste toner counter

T-14-20

Parts counter list			
Item	**Counter**	**Explanation**	**Service life**
DRBL-1 (Unit supplies)	FX-UNIT	Fixing unit paper pass count	150,000
	TR-ROLL	Transfer charger roller high-voltage ON count	150,000
	DV-UNT-C	Developing unit rotation count	150,000
	M-PU-RL	Manual feed tray pickup roller paper pass count	150,000
	M-SP-PD	Manual feed tray separation pad paper pass count	150,000

14.6.2 Clearing Counters

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

- Maintenance/parts counter all clear
Execute service mode > CLEAR > COUNTER to clear all maintenance/parts counters.

- Counter clear on parts replacement
Press the numeric keypad key 0 after displaying the counter for a part just replaced, and the counter will be cleared individually.

14.7 Report Output (REPORT)

14.7.1 Report Output

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

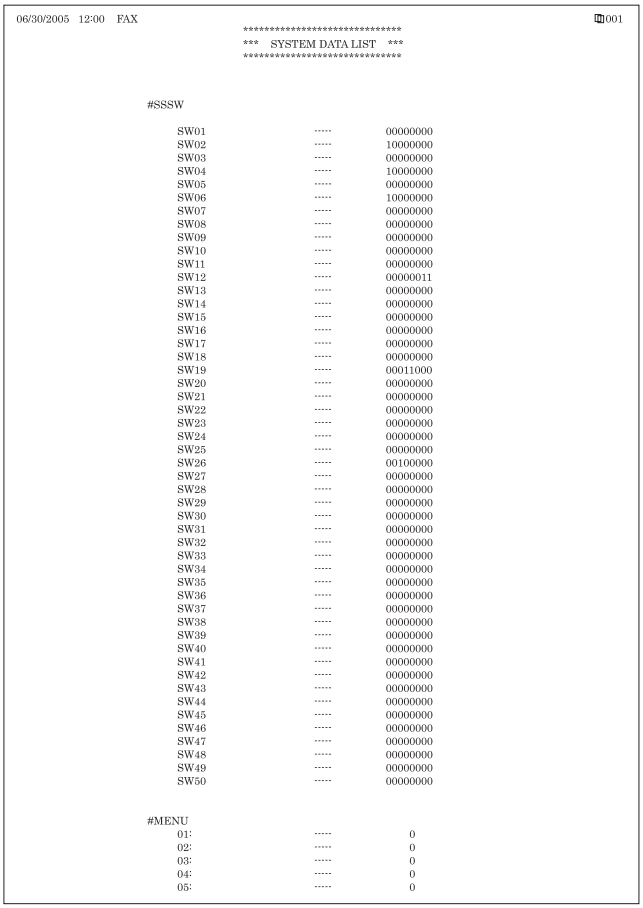
The table below lists the kinds of reports that are supported.

Item	Explanation
SERVICE DATA LIST	Service mode service soft switch output (SSSW, MENU, NUMERIC Param., SPECIAL, NCU, SCAN, PRINT, SYSTEM, ROM, start date)
SYSTEM DATA LIST	Service mode service soft switch output (SSSW, MENU, NUMERIC Param., SPECIAL, NCU, SCAN, PRINT, SYSTEM, ROM, start date) System dump list output
SYSTEM DUMP LIST	Transmission count, reception count, record chart count, error count and other outputs
COUNTER REPORT	Counter output
ERROR LOG LIST	Jam and error history output
SPEC LIST	Type setting, print speed, memory size, ROM indication, adjustment data and other outputs
SERVICE LABEL	Output of an entry format for the service label affixed to the rear cover as shipped

14.7.2 System Data List

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Use it to check the settings associated with the service soft switch and service parameters.



06/30/2005 12:00 FAX 001

****
*** SYSTEM DATA LIST ***
****

#SSSW

SW01	-----	00000000
SW02	-----	10000000
SW03	-----	00000000
SW04	-----	10000000
SW05	-----	00000000
SW06	-----	10000000
SW07	-----	00000000
SW08	-----	00000000
SW09	-----	00000000
SW10	-----	00000000
SW11	-----	00000000
SW12	-----	00000011
SW13	-----	00000000
SW14	-----	00000000
SW15	-----	00000000
SW16	-----	00000000
SW17	-----	00000000
SW18	-----	00000000
SW19	-----	00011000
SW20	-----	00000000
SW21	-----	00000000
SW22	-----	00000000
SW23	-----	00000000
SW24	-----	00000000
SW25	-----	00000000
SW26	-----	00100000
SW27	-----	00000000
SW28	-----	00000000
SW29	-----	00000000
SW30	-----	00000000
SW31	-----	00000000
SW32	-----	00000000
SW33	-----	00000000
SW34	-----	00000000
SW35	-----	00000000
SW36	-----	00000000
SW37	-----	00000000
SW38	-----	00000000
SW39	-----	00000000
SW40	-----	00000000
SW41	-----	00000000
SW42	-----	00000000
SW43	-----	00000000
SW44	-----	00000000
SW45	-----	00000000
SW46	-----	00000000
SW47	-----	00000000
SW48	-----	00000000
SW49	-----	00000000
SW50	-----	00000000

#MENU

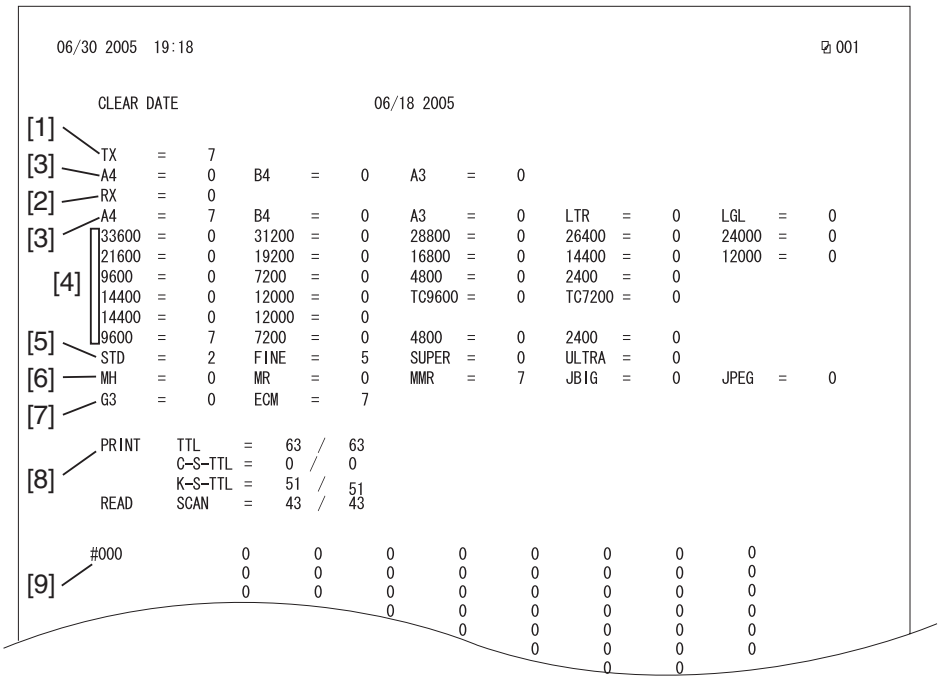
01:	-----	0
02:	-----	0
03:	-----	0
04:	-----	0
05:	-----	0

F-14-1

14.7.3 System Dump List

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

- System Dump List
Use it to check the history of communications, both successful and error.



F-14-2

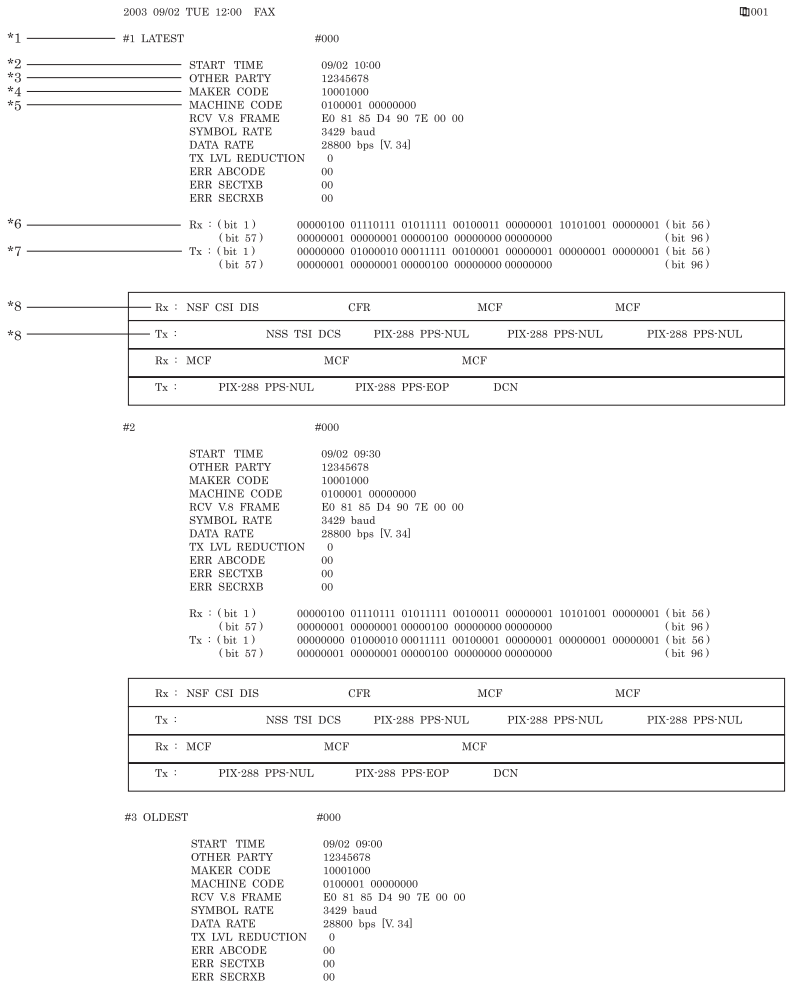
*1: TX, number of total pages transmission.
*2: Total number of pages transmitted/received according to original size.
*3: RX, number of total pages reception.
*4: Total number of pages transmitted and received for each modem speed
*5: Total number of pages transmitted/received in connection with different modem speeds (Standard, Fine, Super Fine, Ultra Fine).
*6: Total number of pages transmitted and received for each coding method
*7: Total number of pages transmitted and received in each mode
*8: Total number of pages printed/scanned
*9: Total number of occurrences for error code

T-14-21

Indication sample					
##280	1	7	3	0	0
	##280 number of errors	##281 number of errors	##282 number of errors		

It provides error information on the 3 most recent communications.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



F-14-3

*1: service error code.
*2: START TIME, date and time (in 24-hr notation).
*3: OTHER PARTY, telephone number sent by the other party.
*4: MAKER CODE, manufacturer code.
*5: MACHINE CODE, model code.
*6: bit 1 through bit 96 of DIS, DCS, or DTC that has been received.
*7: bit 1 through bit 96 of DIS, DCS, or DTC that has been transmitted.
*8: RX, procedural signal received; TX, procedural signal transmitted.

14.7.4 Counter List

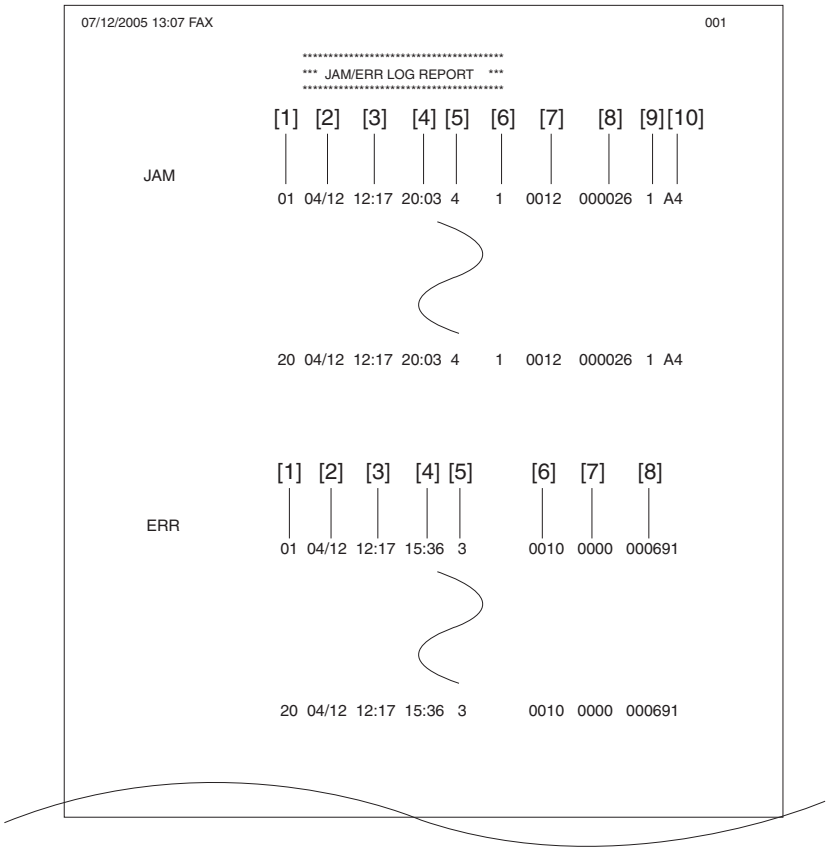
LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Explanation: Maintenance/supplies counter output.
(For more detailed information about the maintenance/supplies counter output, execute service mode > Display counter information > Counters.)

14.7.5 Error Log List

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



F-14-4

Jam history description (JAM)			
	Item	**Explanation**	
[1]	Number	The larger the number of a jam, the more recently it has occurred.	
[2]	Jam date	Date of jam occurrence	
[3]	Jam time		
[4]	Jam recovery time		
[5]	Location	3: Host machine, 4: ADF, 5: Finisher	
[6]	Occurrence category	0: Host machine, 1: ADF, 2: Finisher	
[7]	Jam code	Code	Jam cause
	Host machine	0104	Pickup assembly delay jam
		0208	Pickup assembly stationary jam
		010c	Delivery assembly jam
		0210	Delivery stationary jam
		0214	Host machine retention paper jam
		1118	Door open jam
	ADF	0000	Unknown jam
		0007	Initial stationary
		0008	Read sensor delay jam
		0009	Read sensor stationary jam
		000a	Paper absence (Pull out the document.)
		0010	Pickup NG
[8]	Total counter display		
[9]	Pickup stage position	0: Manual feed tray, 1: Cassette 1, 2: Cassette 2	
[10]	Paper size		

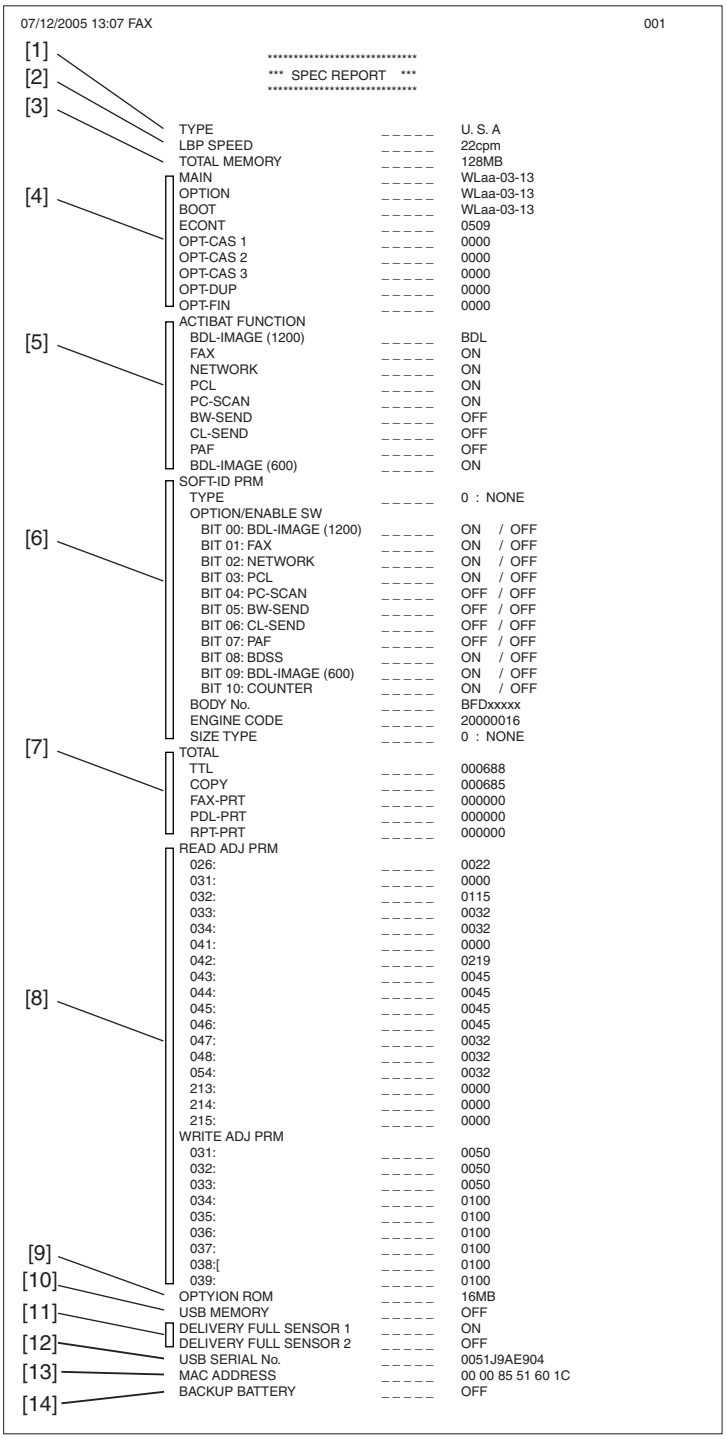
Error history description (ERR)		
	Item	**Explanation**
[1]	Number	The larger the number of an error, the more recently it has occurred.
[2]	Error date	Date of error occurrence
[3]	Error time	
[4]	Error recovery time	
[5]	Location	3: Main unit
[6]	Error code	Error code (4-digit code; for a definition of the code, see the "Error Code" Chapter.)
[7]	Detail code	Detail code of the error code (4-digit code; for a definition of the code, see the "Error Code" Chapter.)

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Error history description (ERR)		
	Item	**Explanation**
[8]	Total counter display	

14.7.6 Spec List

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL



F-14-5

[1] Type setting
[2] Print speed
[3] Memory size
[4] ROM version (MAIN/BOOT/ECONT/option cassette/duplex unit/finisher)
[5] Activation function ON/OFF
[6] Soft ID information
[7] Total counter (TOTAL/COPY/FAX/PDL/REPORT record counts)
[8] Adjustment data (factory scan/record adjustment values)
[9] Option ROM availability
[10] USB memory availability
[11] No. 1/No. 2 paper full sensor sensor availability
[12] USB serial number
[13] MAC address

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

[14] Backup battery availability

14.7.7 Service Label

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Enter the value given in the service label affixed to the rear cover when it has been replaced with a new one.

#PRINT>#PRINT NUMERIC					#SCAN>#SCAN NUMERIC				
	FACTORY	1	2	3		FACTORY	1	2	3
031	50				026				
032	50				031				
033	50				032				
034	100				033				
035	100				034				
036	100				041				
037	100				042				
038	100				043				
039	100				044				
					045				
					046				
					047				
#SCAN>#SCAN NUMERIC					048				
					054				
					213				
					214				
body No:BFDxxxxx					215				

F-14-6

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.8 Download (DOWNLOAD)

14.8.1 Download

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The following parts of this unit can be upgraded by executing download mode using the service support tool (SST) (for more information, see the "Upgrading" section):

Main unit
- Flash ROM (system + boot) mounted on the image processor PCB
- ROM mounted on the PCL board

14.9 Data Initialization Mode (CLEAR)

14.9.1 Clear

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Group	Item	Explanation
TEL & USER DATA		Clears all user-registered and -set areas of telephone registration data and user data. (Telephone registration refers to the registration of codes on one-touch dialing, abbreviated dialing, and group dialing.)
SERVICE DATA		Clears the system dump list, except for counters and clear dates.
COUNTER		Clears the maintenance counter, parts counter and mode-specific counters. Initializes the counter (numerator) in the system dump list.
TYPE		Initializes user data and service data to suit specified destination settings.
SOFT-CNT		Not used
HST	ACTIVITY	Initializes the activity report
	ACCOUNT	Clears print histories.
	JAM	Clears the jam history.
	ERR	Clear the error (error code) history.
	ALARM	Clears the alarm history.
CARD		Not used
ERR	E355	Not used
	E719	Not used
PWD		Clears the system administrator's password.
FILE SYSTEM		Not used
FORMAT*1	USB MEMORY	Format the USB memory. (This mode is used when the USB memory error is damaged and E744 occurs.)
	LICENSE DRIVE	Not used
ALL		Clears user and service data (except for some scan parameters and print parameters), and the counter setting/registration data in the system dump list, except for the print count.

14.10 ROM Management (ROM)

14.10.1 ROM display

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

The table below lists the items of ROM display mode that are supported.

T-14-22

Item	Explanation
MAIN	Displays the version number of the ROM (SYSTEM) mounted on the image processor PCB.
MAIN2	Displays the version of the ROM (BOOT) mounted on the image processor PCB.
ECONT	Displays the version number of the ROM mounted on the DC controller PCB.
OPROM	Displays the version number of the option ROM.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.11 Test Mode (TEST)

14.11.1 Overview

14.11.1.1 Outline

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Test mode must be executed by keeping track the flow of menu items appearing on the LCD. Menu items in test mode are organized into seven blocks as described below. Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.

1. D-RAM test ((1) D-RAM)
Checks to see if data can be correctly written to and read from D-RAM.

2. Scan test ((2) SCAN TEST)
Used to adjust contact sensor output and the position at which a document fed from the ADF is scanned.

3. Print test ((3) PRINT TEST)
Used to generate service test patterns.

4. Modem test ((4) MODEM TEST)
Performs relay actuation, modem DTMF and tonal signal transmission/reception tests.

5. Aging test ((5) AGING TEST)
Not used.

6. Function test ((6) FUNCTION TEST)
Used to verify the operations of microswitches, sensors, speakers and ADF functions.

7. Roller cleaning mode ((0) ROLLER CLEAN)
Used to clean the delivery roller or ADF pickup roller by idling them.

14.11.1.2 Test Mode Menu List

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Test mode menu list
To invoke test mode, follow these steps:

1) Enter service mode.
Press the operation panel user mode key, 2 key, 8 key and user mode key in this order.
2) Press the operation panel arrow keys to show "TEST MODE."
3) Press the OK key.
To exit test mode, press the user mode key to return to standby mode.

T-14-23

Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.					
Group	**Subgroup**	**Item 1**	**Item 2**	**Item 3**	**Explanation**
TEST MODE [1] - [9], [#]					
(1) DRAM [1] - [2]					D-RAM data check
	(1) D-RAM TEST				Write/read check
	(2) D-RAM TEST				Read check
(2) SCAN TEST [1] - [8]					
	(1) SHADING				Automatic gain adjustment
	(3) SHEET POS ADJ				CS position adjustment
	(4) TRASH DETECT				Dust detection
	(5), (6), (9), (*)				Not used
(3) PRINT TEST [1] - [9]					
	(1)				Not used
	(2)				All-black output
	(3)				Not used
	(4)				Back belt output
	(5), (6), (7), (8), (9), (*)				Not used
(4) MODEM TEST [1] - [9]					

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.					
Group	**Subgroup**	**Item 1**	**Item 2**	**Item 3**	**Explanation**
	(1) RELAY TEST [1] - [2]				
		(1) RELAY TEST 1			NCU relay (and switch) ON/OFF test
		(2) RELAY TEST 2			230 V common NCU test
	(2) FREQ TEST [0] - [6]				Frequency test
		(0) FREQ TEST 462Hz			
		(1) FREQ TEST 1100Hz			
		(2) FREQ TEST 1300Hz			
		(3) FREQ TEST 1500Hz			
		(4) FREQ TSST 1650Hz			
		(5) FREQ TEST 1850Hz			
		(6) FREQ TEST 2100Hz			
	(4) G3 SIGNAL TX TEST [0] - [8]				G3 signal transmission test
		(0) G3 SIGNAL TX TEST 300bps			
		(1) G3 SIGNAL TX TEST 2400bps			
		(2) G3 SIGNAL TX TEST 4800bps			
		(3) G3 SIGNAL TX TEST 7200bps			
		(4) G3 SIGNAL TX TEST 9600bps			
		(5) G3 SIGNAL TX TEST TC7200bps			
		(6) G3 SIGNAL TX TEST TC9600bps			
		(7) G3 SIGNAL TX TEST 12000bps			
		(8) G3 SIGNAL TX TEST 14400bps			
	(5) DTMF TEST [0] - [9], * , #				DTMF transmission test
		(0) G3 SIGNAL TX TEST 300bps			
		(1) G3 SIGNAL TX TEST 2400bps			
		(2) G3 SIGNAL TX TEST 4800bps			
		(3) G3 SIGNAL TX TEST 7200bps			
		(4) G3 SIGNAL TX TEST 9600bps			
		(5) G3 SIGNAL TX TEST TC7200bps			
		(6) G3 SIGNAL TX TEST TC9600bps			
		(7) G3 SIGNAL TX TEST 12000bps			
		(8) G3 SIGNAL TX TEST 14400bps			
		(9) G3 SIGNAL TX TEST TC9600bps			
		(*) G3 SIGNAL TX TEST 12000bps			
		(#) G3 SIGNAL TX TEST 14400bps			
	(6) MODEM TEST				Tonal sign reception test
	(8) G3 V.34 Tx TEST				V34 G3 signal transmission test
	(9)				Not used
(5) AGING TEST					Not used
(6) FUNCTION TEST [1] - [9]					

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Numerals enclosed in parentheses denote a numeric keypad key to be pressed each.					
Group	**Subgroup**	**Item 1**	**Item 2**	**Item 3**	**Explanation**
	(1) FUNCTION TEST G3 4800bps				G3 4800 bps signal transmission test
	(3) 6-3 SENSOR [1] - [8]				Sensor checks
		(1) SENSOR CHECK 0:NORMAL 1:LATCH			
			(0) SENSOR NORMAL [0] - [2]		
				(0) CAS 0 REG 0 DEL 0 MULTI 0	
				(1) TONER 0 FULL 0 2ND-DEL 0000	
				(2) OP1 0000 OP2 0000 OP3 0000 PATH 0000	
			(1) SENSOR LATCH [0] - [2]		
				(0) CAS 0 REG 0 DEL 0 MULTI 0	
				(1) TONER 0 FULL 0 2ND-DEL 0000	
				(2) OP1 0000 OP2 0000 OP3 0000 PATH 0000	
		(2) SWITCH CHECK [0] - [1]			
			(0) CAS 0000 LOCK 0000		
			(1) OP1 0000 OP2 0000 OP3 0000		
		(3) DS ON DES of HPS ON BCVS of			
		(4) REF xxx ANT xxx |ANT-REF| xxx			
		(5) BSCT on BDAC[A3] BDSS3-0 [of of of of]			
		(6) NCR Sts: NCR xxxxx DPT MGN OK RDY 0101			
		(7) LAST of EXIT of REG of CVR of			
		(8) WIND1 of WIND2 of WIND3 of WIND4 of			
	(4) ADF FEED TEST				ADF delivery operation test
	(5) BOOK FEED TEST				Book copy operation test
	(6) 6-6 SPEAKER FREQ:[1] VOL:[2]				Speaker volume and buzzer frequency test
	(7) Operation Panel				Operation panel key, LCD and LED test
	(8) FUNCTION TEST LAMP TEST ALL				Lamp test
	(9) LINE TEST [1] - [3]				Line signal reception test
(0) ROLLER CLEAN 0:PRT 1:ADF					Printer and ADF roller cleaning
	(0) PRT ROL CLEAN Press start key				
	(1) ADF ROL CLEAN Press start key				

14.11.2 DRAM Test

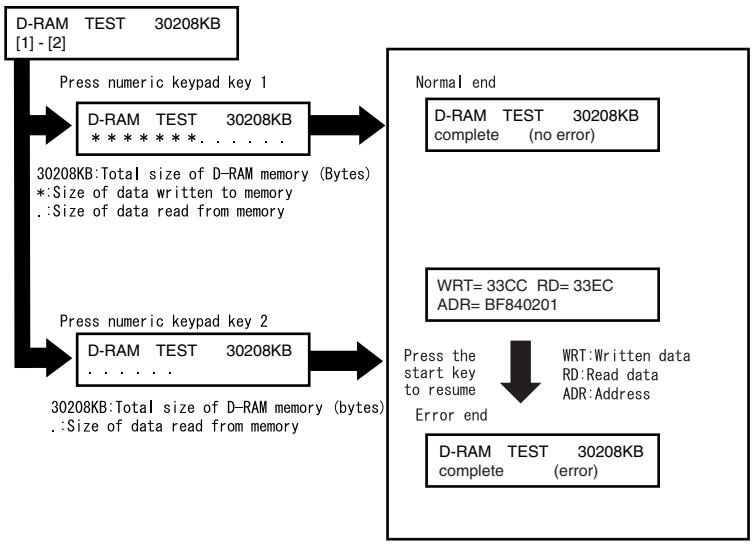
14.11.2.1 D-RAM Test<(1) D-RAM TEST>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

D-RAM Test((1) D-RAM)
Press the numeric keypad key 1 on the test mode menu to select the D-DRAM test.
Press numeric keypad keys 1 and 2 during the D-DRAM test to carry out the individual tests described below.

Numeric keypad key 1
Checks to see if data can be correctly written to and read from all areas of D-RAM (SDRAM). If an error occurs making this check, the test is aborted, with an error appearing on the touch panel (LCD).

Numeric keypad key 2
Checks to see if data can be correctly read from all areas of D-RAM (SDRAM). If an error occurs making this check, the test is aborted, with an error appearing on the touch panel (LCD).



F-14-7

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

14.11.3 Scan Test

14.11.3.1 Scan Test ((2) SCAN TEST)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Scan test ((2) SCAN TEST)

Press the numeric keypad key 2 on the test mode menu to select the CCD test.
Press numeric keypad keys 1, 3 and 4 during the CCD test to carry out the individual tests described below.

Numeric keypad key 1
Corrects the LED output of the contact sensor and sets its parameters automatically. (AGC adjustment)

Numeric keypad key 3
Adjusts the document scan position (only on models with the ADF feature installed). Adjusts the position of the contact sensor for scanning documents fed from the ADF automatically.

Numeric keypad key 4
Detects trash at reader scan positions A/B/C.
Pos A: Reference read position
Pos B: About 0.5 mm inside of the roller from the reference position
Pos C: About 1.0 mm inside of the roller from the reference position

14.11.4 Print Test

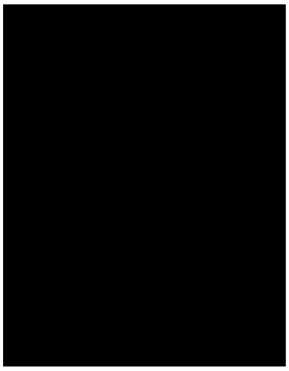
14.11.4.1 Print Test ((3) PRINT TEST)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

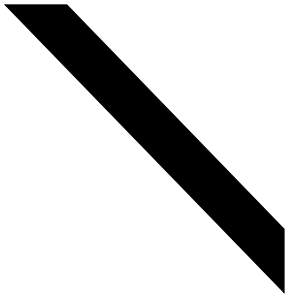
Print test ((3) PRINT TEST)
Press the numeric keypad key 3 on the test mode menu to select the print test.
Press numeric keypad keys 2 and 4 during the print test to generate test patterns as described below. Two kinds of service test patterns are available. Other test patterns are reserved for factory/development purposes.

Numeric keypad key 2
(2) BLACK: All-black output
Numeric keypad key 4
(4) ENDURANCE: Black belt output

To cancel test printing, press the stop key.



Use it to make sure that the print pattern does not have white lines or uneven image.



Use it to make sure that the print pattern does not have contraction/ elongation of an image or dirt/black line.s

F-14-8

14.11.5 Modem Test

14.11.5.1 MODEM Test ((4) MODEM TEST)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

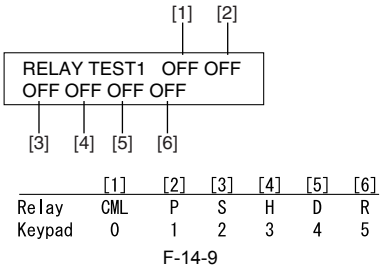
MODEM test((4) MODEM TEST)
These tests test modem and NCU transmission and reception. The modem tests check whether signals are sent correctly from the modem by comparing the sound of the signals from the speaker with the sounds from a normal modem.
End this test by pressing the Stop key.

Keypad	Type	Description
1	Relay test	Use it to turn on/off a selected relay to execute a switch-over test
2	Frequency test	The modem sends tonal signals from the modular jack and the speaker.
4	G3 signal transmission test	The modem sends G3 signals from the modular jack and the speaker.
5	DTMF signal reception test	Use it to generate the DTMF signal coming from the modem using the telephone line terminal and the speaker.
6	Tonal signal reception test	Use it to monitor a specific frequency and the DTMF signal received from the telephone line terminal by causing them to be indicated on the LCD (i.e., the presence/absence as detected). The reception signal is generated by the speaker.
8	V.34 G3 signal transmission test	The modem sends V.34 G3 signals from the modular jack and the speaker.

Relay Test

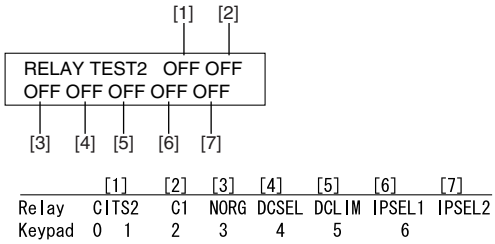
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Press '1'or '2' on the keypad on the Modem test menu to select relay test mode. Use the keypad to operate the various relays of the NCU. '2' on the keypad is used for 230V machine.
Numeric keypad key 1
The input key and relay are shown below:



F-14-9

Numeric keypad key 2
The input key and relay are shown below:



F-14-10

The touch panel (LCD) is turned on or off in relation to the transmission of the relay operation signal as is operated on the keypad; for this reason, you cannot use the touch panel (LCD) to check a fault on a single relay.

Frequency Test
A press on '2' on the keypad from the MODEM test menu selects the frequency test.
In this test, signals of the following frequencies from the modem are transmitted using the telephone line terminal and the speaker. To select a different frequency, use the keypad.

Keypad	Frequency
1	462Hz
2	1100Hz
3	1300Hz
4	1500Hz
5	1650Hz
6	1850Hz
7	2100Hz

MEMO:
The frequency and the output level of individual frequencies are in keeping with the output level set in service mode.

G3 Signal Transmission Test
A press on '4' on the keypad from the MODEM test menu selects the G3 signal transmission test. In this test, the following G3 signals from the modem are transmitted using the telephone line terminal and the speaker. To select a different transmission speed, use the keypad.

Keypad	Transmission speed
0	300bps
1	2400bps
2	4800bps
3	7200bps
4	9600bps
5	TC7200bps
6	TC9600bps
7	12000bps
8	14400bps

MEMO:
The output level of individual signals is in keeping with the setting made in service mode.

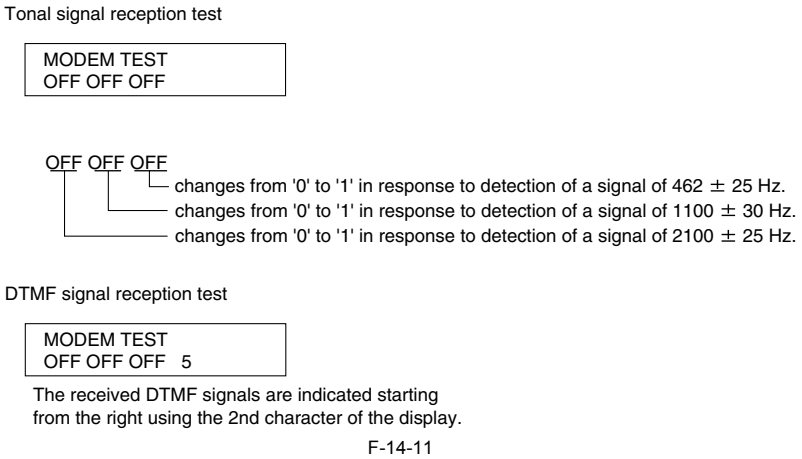
DTMF Signal Transmission Test
A press on '5' on the MODEM test menu selects the DTMF signal transmission test. In the test, the following DTMF signals from the modem are transmitted using the telephone line terminal and the speaker. The number pressed on the keypad selects a specific DTMF signal.

MEMO:
The output level of individual signals is in keeping with the setting made in service mode.

Tonal/DTMF Signal Reception Test

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

A press on '6' on the keypad from the MODEM test menu selects the tonal signal/DTMF signal reception 0 test. In this signal, the tonal signal/DTMF signal received from the telephone line terminal can be checked to find out if it was detected by the modem.


Tonal signal reception test
MODEM TEST
OFF OFF OFF
OFF OFF OFF
changes from '0' to '1' in response to detection of a signal of 462 ± 25 Hz.
changes from '0' to '1' in response to detection of a signal of 1100 ± 30 Hz.
changes from '0' to '1' in response to detection of a signal of 2100 ± 25 Hz.
DTMF signal reception test
MODEM TEST
OFF OFF OFF 5
The received DTMF signals are indicated starting
from the right using the 2nd character of the display.

F-14-11

V.34 G3 Signal Transmission Test
A press on '8' on the keypad from the MODEM test menu selectes the V.34 G3 signal transmission test. The V.34 G3 signals below are sent from the modem using the modular jack and the speaker by pressing the start key. The Baud rate can be changed with the keypad, and the Speed can be changed with the left/right arrow key.

Keypad	Baud rate
0	3429baud
1	3200baud
2	3000baud
3	2800baud
4	2743baud
5	2400baud

Left/right arrow key	Transmission speed
	2400bps
	4800bps
	7200bps
	9600bps
<	12000bps
	14400bps
	16800bps
	19200bps
	21600bps
>	24000bps
	26400bps
	28800bps
	31200bps
	33600bps

14.11.6 Faculty Test

14.11.6.1 FUNCTION TEST <(6) FUNCTION TEST>

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Function test ((6) FUNCTION TEST)
Press the numeric keypad key 6 on the test mode menu to select the function test.
Press numeric keypad keys 1 and 3 to 9 during the function test to enter the menus listed below.

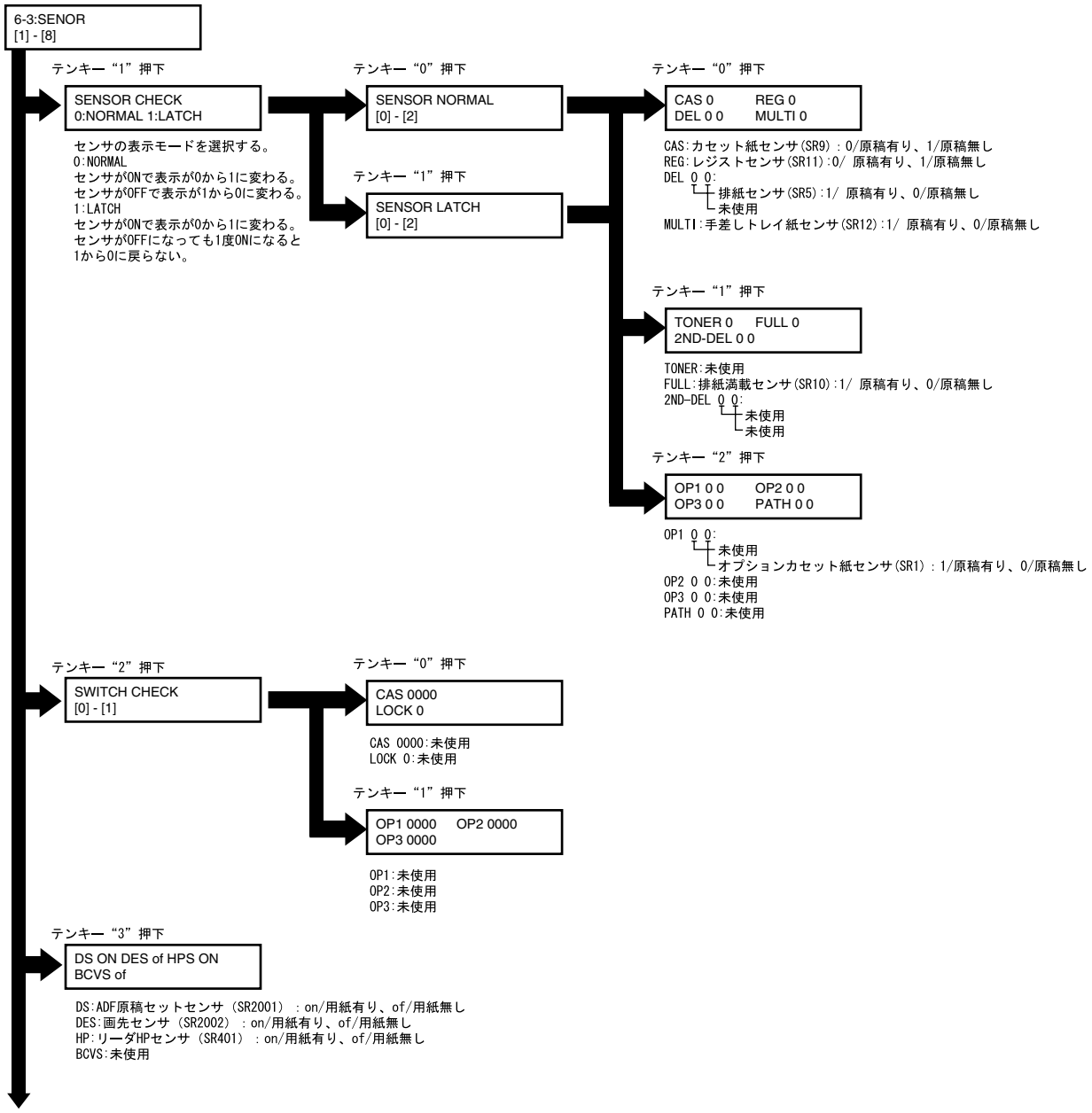
T-14-24

Keypad	Item	Explanation
1	G3 signal transmission test	Transmits 4800-bps G3 signals to a telephone line and speaker.
2	Not used	
3	Sensor test	Sensor actuation test
4	ADF test	ADF operation test
5	Book test	Host machine operation test
6	Speaker test	Speaker operation test
7	Operation panel test	LCD, LED and control key operation test
8	Lamp test	Contact sensor illumination test
9	Line signal reception test	NCU board signal sensor and frequency counter operation test

G3 signal transmission test (6-1: G3 480 bps Tx)
Press numeric keypad key 1 on the FUNCTION TEST menu to select the G3 signal transmission test. This test transmits 4800-bps G3 signals from the telephone line connection terminal and speaker.

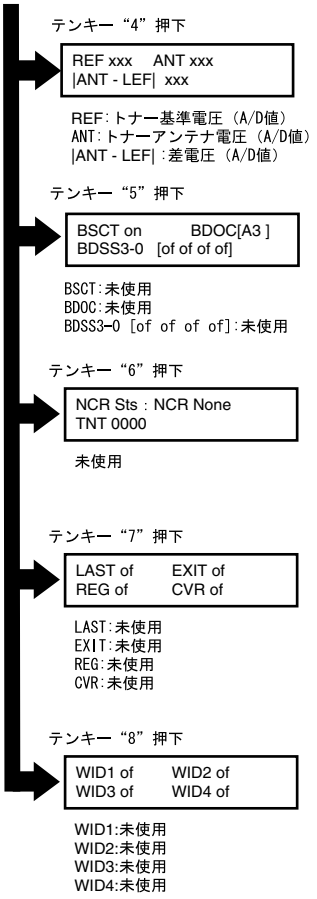
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Sensor test (6-3: SENSOR)
This mode is used to verify the status of the unit sensors from LCD indications. Press numeric keypad key 3 on the FUNCTION TEST menu to select the sensor test. LCD indications change as the associated sensors turn on and off.



F-14-12

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

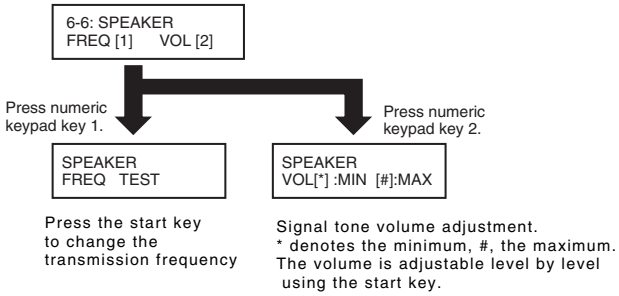


F-14-13

ADF feed test (ADF FEED TEST)
ADF operation verification mode. Press numeric keypad key 4 on the FUNCTION TEST menu to select the ADF feed test. Place a document on the document platen and press the start key to transfer the document at the speed matched to the scan resolution setting. In this test, enter a transfer speed between 500 and 2000 (mm/s) from the numeric keypad and verify the transfer speed. Select between the ON and OFF states with the left and right cursor keys to select between single-sided document feed (OFF) and double-sided document feed (ON).

Book feed test (6-5: BOOK FEED TEST)
Performs a book feed operation with a specified magnification and in a specified size.

Speaker test (6-6: SPEAKER)
Speaker operation verification mode. Press numeric keypad key 6 on the FUNCTION TEST menu to select the speaker test. In this test, the speaker generates tonal signals at 100 Hz intervals, from 200 Hz to 5 kHz, in varying sound volumes. Signal output from the speaker is thus verified.

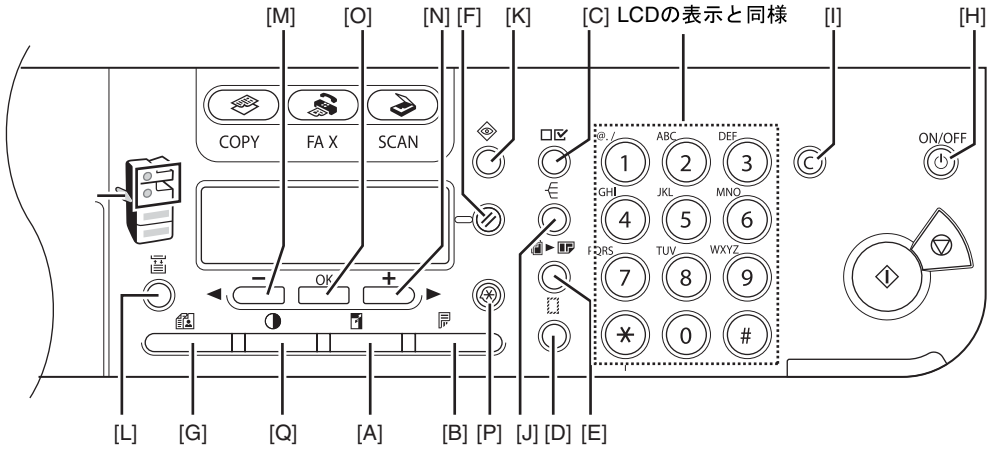

6-6: SPEAKER
FREQ [1] VOL [2]
Press numeric keypad key 1.
Press numeric keypad key 2.
SPEAKER
FREQ TEST
SPEAKER
VOL[*] :MIN [#]:MAX
Press the start key to change the transmission frequency
Signal tone volume adjustment.
* denotes the minimum, #, the maximum.
The volume is adjustable level by level using the start key.

F-14-14

Operation panel test (6-7: OPERATION PANEL)
Operation panel operation verification mode. Press numeric keypad key 7 on the FUNCTION TEST menu to select the OPERATION PANEL test menu. Functions that can be verified from this menu are listed below.

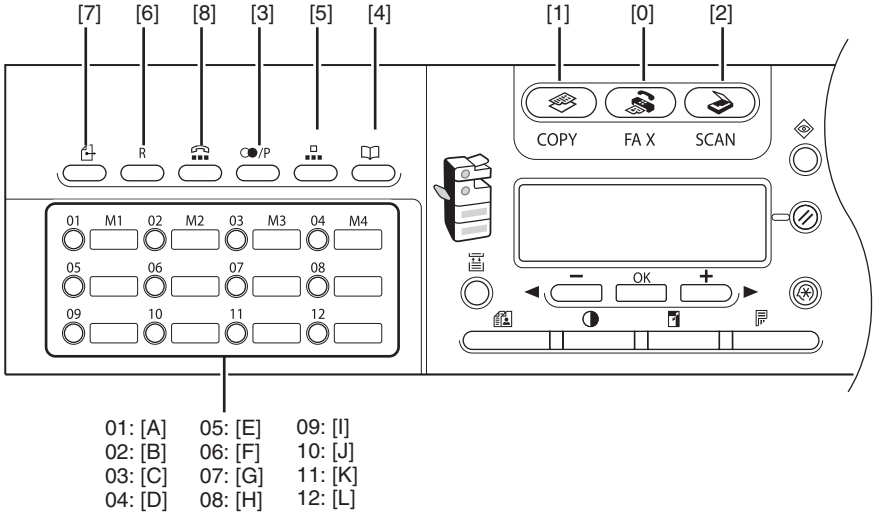
- LCD test
Start the OPERATION PANEL test by pressing the start key. The LCD test is carried out first, displaying all-H characters. Press the start key once again to produce a total black display.
- LED lamp test
Press the start key after the LCD test to select the LCD lamp test, turning on all lamps on the operation panel.
- Operation key test
Press the start key after the LCD lamp test to select operation key test (1). The test succeeds if the characters appearing in the LCD are erased when the corresponding keys are pressed.
When the entire character display is erased, operation key test (2) launches (only on models with the FAX feature installed). As in (1), the test succeeds if the characters appearing in the LCD are erased when the corresponding keys are pressed.
Operation key test (1) correspondence diagram

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



F-14-15

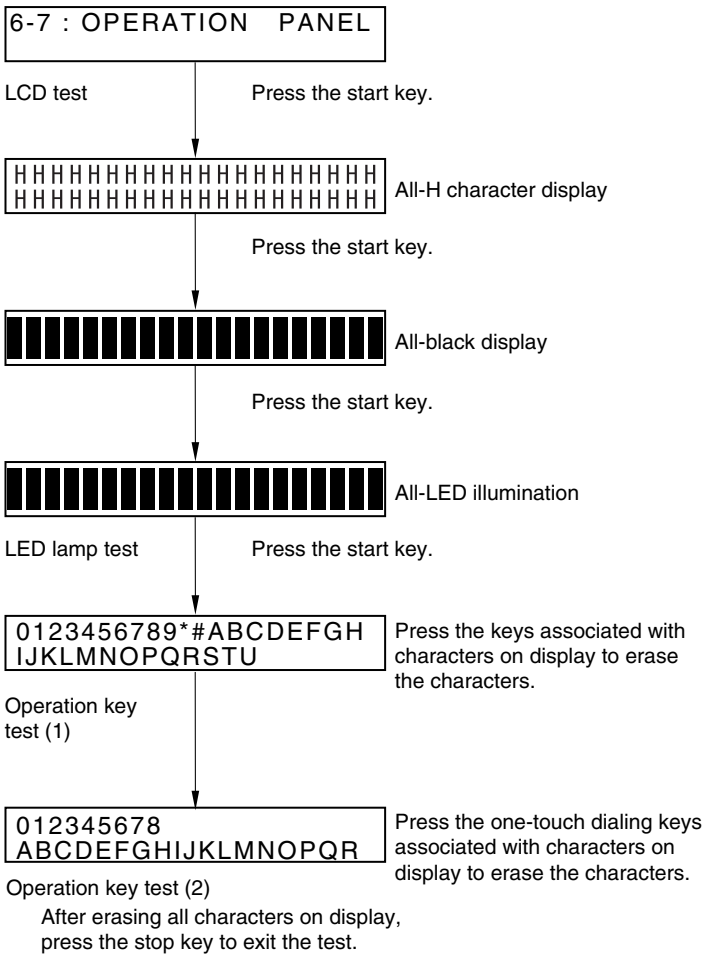
Operation key test (2) correspondence diagram



F-14-16

The flow of operation panel testing is shown below.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com


6-7 : OPERATION PANEL
LCD test
Press the start key.
All-H character display
Press the start key.
All-black display
Press the start key.
All-LED illumination
LED lamp test
Press the start key.
0123456789*#ABCDEFGH
IJKLMNOPQRSTU
Press the keys associated with characters on display to erase the characters.
Operation key test (1)
012345678
ABCDEFGHIJKLMNOPQR
Press the one-touch dialing keys associated with characters on display to erase the characters.
Operation key test (2)
After erasing all characters on display, press the stop key to exit the test.

F-14-17

Line signal reception test (9: LINE DETECT)
Press numeric keypad key 9 on the FACULTY menu to select the line signal reception test. In this test, verify the successful operations of the NCU signal sensor and the frequency counter. Menu 1 detects the CI state, while menu 3 detects the CNG signal.

Test menu 1
Press numeric keypad key 1 on the LINE DETECT menu to select test menu 1. When CI is detected on the telephone line connection terminal, the LCD display changes from OFF to ON, indicating the received frequency. The LCD also displays the on-hook or off-hook state of an external telephone set as detected. The LCD displays, from left to right, CI, CI frequency, hook port and FC with indications of 1:ON and 0:OFF.

Test menu 2
Press numeric keypad key 2 on the LINE DETECT menu to select test menu 2. When the CNG signal is detected on the telephone line connection terminal, the LCD display changes from OFF to ON, indicating the received frequency. The LCD displays the status of CML, CNG and FED detection, from left to right, with ON/OFF indications. Numeric keypad key 2 turns on the CML relay to detect CNG.

Test menu 3
Press numeric keypad key 3 on the LINE DETECT menu to select test menu 3. When the CNG signal is detected on the telephone line connection terminal, the LCD display changes from OFF to ON, indicating the received frequency. The LCD displays the status of CML, CNG and FED detection, from left to right, with ON/OFF indications. Numeric keypad key 3 turns off the CML relay to detect CNG.

Lamp test (6-8: LINE DETECT)
Press numeric keypad key 8 on the FACULTY menu to select the scan lamp illumination mode. The test checks to see if the scan lamp is on or not.
Numeric keypad key 1 selects LAMP TEST ALL. Press the start key to turn on all scan lamps. LAMP TEST AGC is not used.

14.11.7 Cleaning Mode

14.11.7.1 Roller cleaning mode ((0) ROLLER CLEAN)

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

Roller cleaning mode ((0) ROLLER CLEAN)
Press numeric keypad key 0 in test mode to select roller cleaning mode. Press numeric keypad keys 1 and 2 during this test to enter the following menus:
Numeric keypad key 1
Press the start key clean the ADF pickup/feed rollers by idling.

Press the stop key to exit this mode.

Numeric keypad key 2
Press the start key clean the unit transfer rollers by idling.
Press the stop key to exit this mode.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 15 Upgrading

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

15.1 Outline....15-1
15.1.1 Overview of Upgrade....15-1
15.2 Making Preparations....15-1
15.2.1 Registering the System Software....15-1
15.2.2 Connection....15-3
15.3 Downloading System Software....15-3
15.3.1 Downloading the System Software....15-3
15.3.1.1 Downloading Procedure....15-3
15.3.2 Downloading the Boot Software....15-8
15.3.2.1 Downloading Procedure....15-8
15.3.3 Otehr Upgrade Methods....15-8
15.3.3.1 Downloading the PCL Software....15-8

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

15.1 Outline

15.1.1 Overview of Upgrade

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

This machine and options can be upgraded by downloading system software programs from the personal computer (hereafter called as the PC) in which a service support tool (hereafter called SST) has been loaded.
System software programs and upgrade tools are listed in the following table:

T-15-1

Type	System software type	Upgrade tool	Remarks
		SST	
Main unit	System (main controller)	Yes	Main controller also controls the reader.
	Boot (boot program)	Yes	
	PCL	Yes	16MB ROM PCB

Download the system software for PCL board following the same procedure described in "Downloading the System".

15.2 Making Preparations

15.2.1 Registering the System Software

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

System software programs to be downloaded need to be registered in the SST.
The system software programs are registered with the names listed below.

<Software Programs Preinstalled in Main Unit>

T-15-2

Display model	Compatible product name	Remarks
MF6530_50	MF6530, MF6550	Flash ROM 12MB
MF6531	MF6531	Flash ROM 12MB
MF6500	MF6540PL, MF6550, MF6560, MF6560PL, MF6570, MF6580, MF6580PL	Flash ROM 16MB

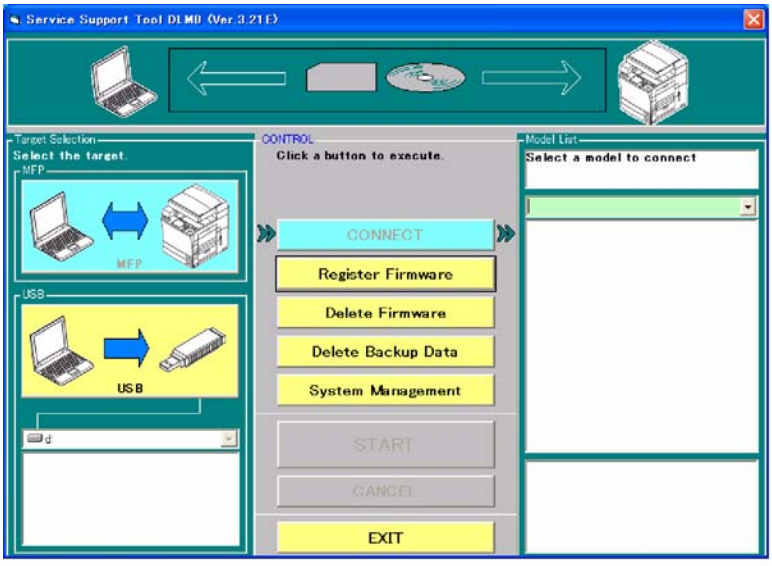
Use the firmware for the model suitable for the compatible product.

Unit name:
- Main controller: System
- Boot program: Boot
- PCL board: PCL

The system software registration program is explained below taking System as an example.

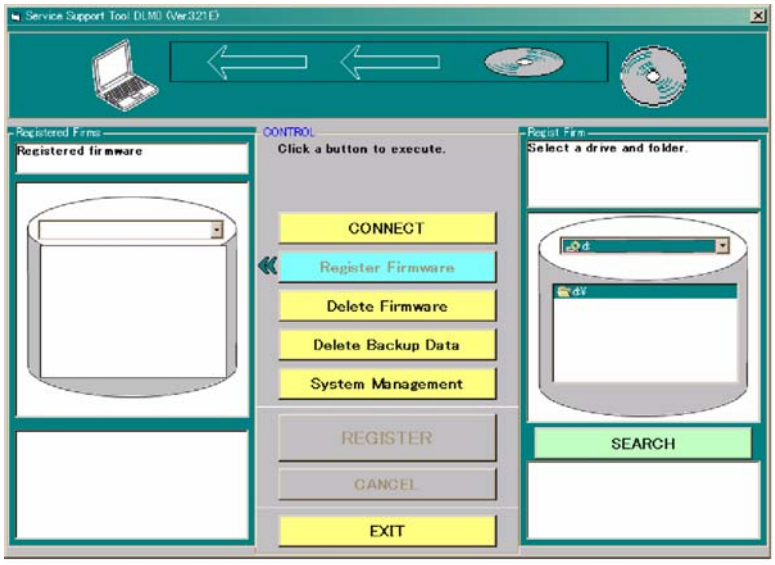
[Preparation]
Have the following ready:
- PC in which SSTv3.21 or later is installed
- System CD containing the firmware for the relevant model

[System Software Registration Procedure]
1) Start the PC.
2) Insert the system CD in the PC.
3) Start SST.
4) Click the "Register Firmware" button.



F-15-1

5) Select the drive in which the system CD is inserted, and then click the "SEARCH" button.

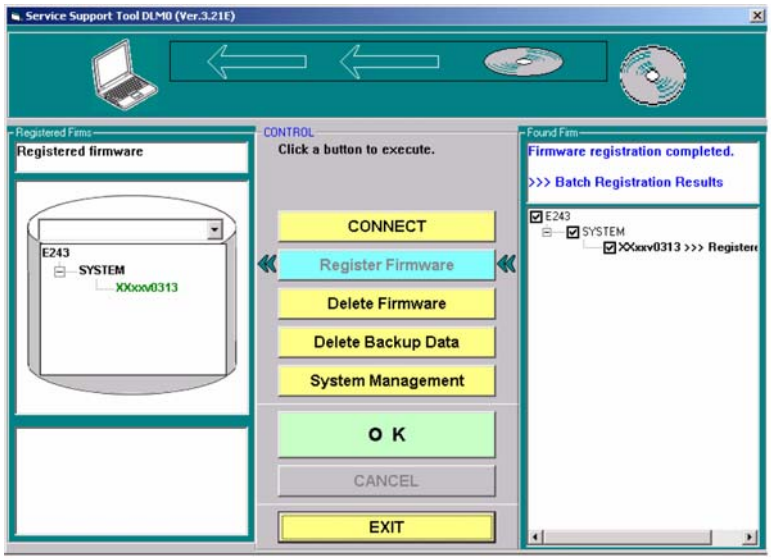


F-15-2

6) A list of system software programs contained in the system CD is displayed. Uncheck the checkboxes of unnecessary folders and system software programs, and then click the "REGISTER" button.

⚠

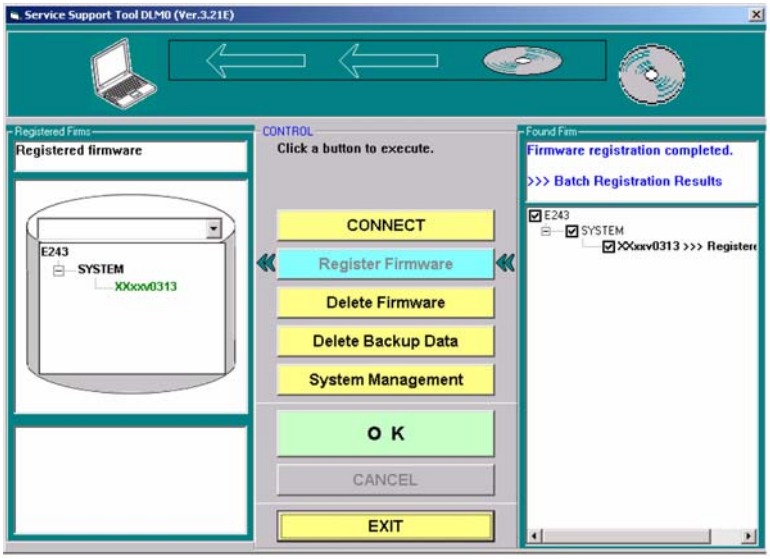
This machine allows two or more system software programs to be register at the same time. However, it does not allow two or more them to be downloaded at the same time. If two or more software programs need to be upgraded, download them one by one.



F-15-3

7) When the system software program registration result appears, click the OK button.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

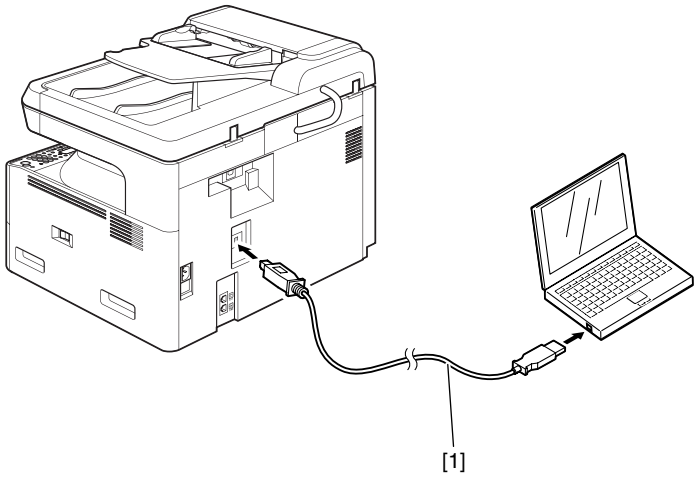


F-15-4

15.2.2 Connection

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

1) Turn off the main power switch of this machine, and then disconnect the cables connected to this machine.
2) Connect USB connector on the back of this machine to the PC using the USB cable [1].



F-15-5

15.3 Downloading System Software

15.3.1 Downloading the System Software

15.3.1.1 Downloading Procedure

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

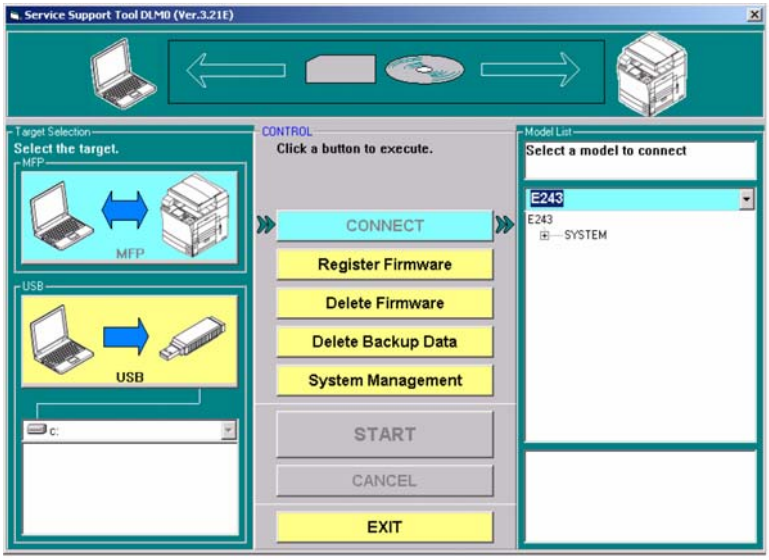
1) Turn on the power switch of the PC and start SST.
2) When the power switch is turned on, the Found New hardware Wizard appears. Click "Cancel".

Found New Hardware Wizard
Welcome to the Found New Hardware Wizard
This wizard helps you install a device driver for a hardware device.
To continue, click Next.
< Back
Next >
Cancel

F-15-6

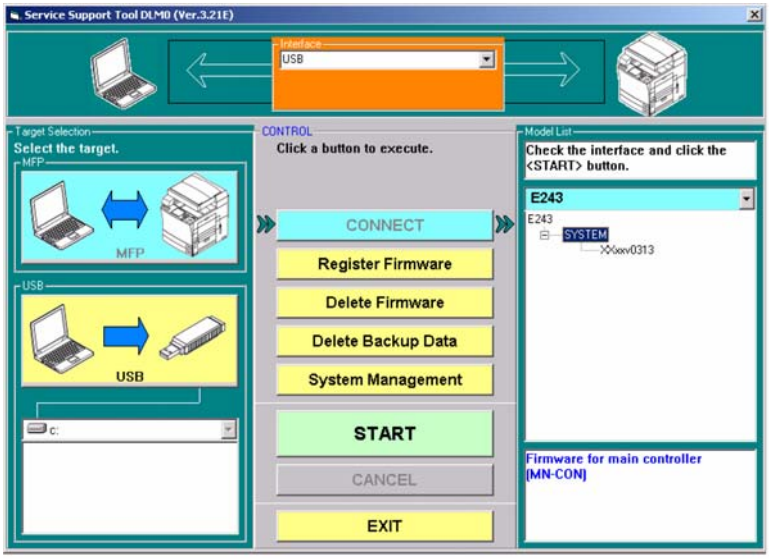
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

3) Select "MFP" in "Target Selection", and then select "E243" in "Model List".



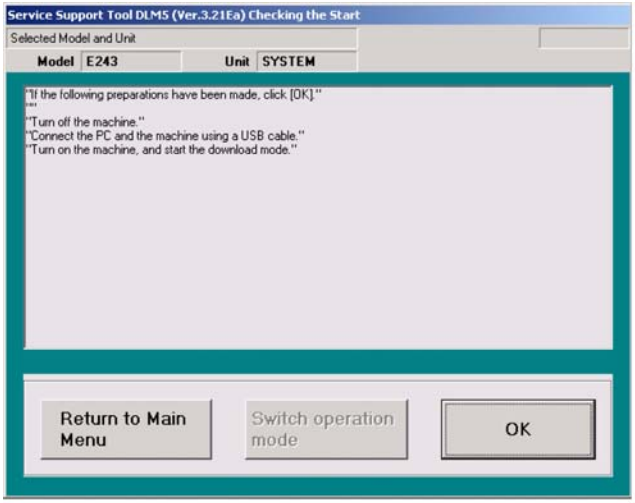
F-15-7

4) Double-click the "System" folder in "Model List" to check the system software version. Select "USB" in "Interface", and then click the "START" button.



F-15-8

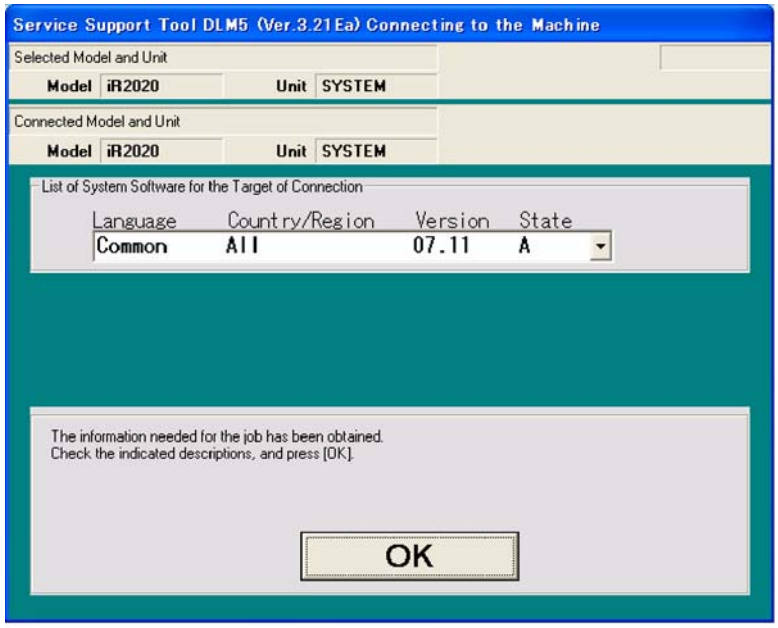
5) Turn on the power switch of the host machine.
6) Press the following keys on the control panel to enter the service mode.
Additional Functions Key > 2 Key > 8 Key > Additional Functions Key
7) Using the plus (+) or minus (-) key, select "#DOWNLOAD".
8) Press the OK key on the control panel to place the host machine in the downloading wait mode ("#DOWNLOAD CONNECTED" is displayed).
9) Press the OK button on the SST screen displayed on the display of the PC.


Service Support Tool DLM5 (Ver.3.21Ea) Checking the Start
Selected Model and Unit
Model E243
Unit SYSTEM
"If the following preparations have been made, click [OK]."
"Turn off the machine."
"Connect the PC and the machine using a USB cable."
"Turn on the machine, and start the download mode."
Return to Main Menu
Switch operation mode
OK

F-15-9

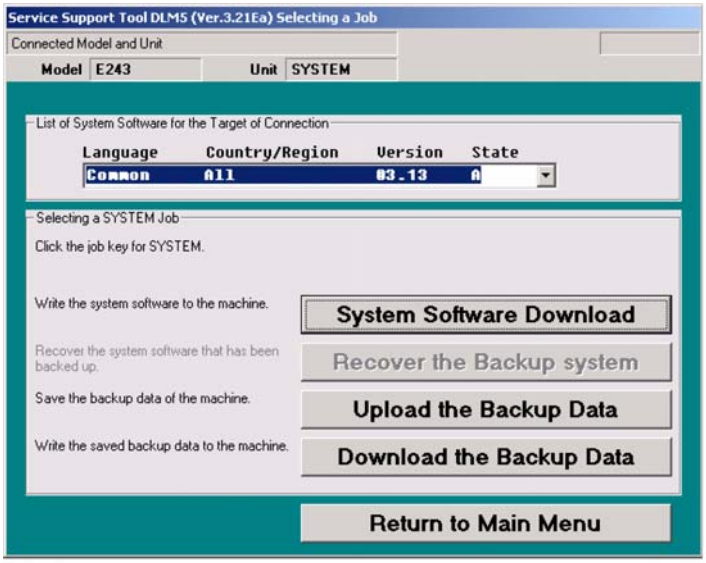
Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

10) When connection is complete, the following screen appears. Click the OK button.


Service Support Tool DLM5 (Ver.3.21Ea) Connecting to the Machine
Selected Model and Unit
Model iR2020 Unit SYSTEM
Connected Model and Unit
Model iR2020 Unit SYSTEM
List of System Software for the Target of Connection
Language Country/Region Version State
Common All 07.11 A
The information needed for the job has been obtained.
Check the indicated descriptions, and press [OK].
OK

F-15-10

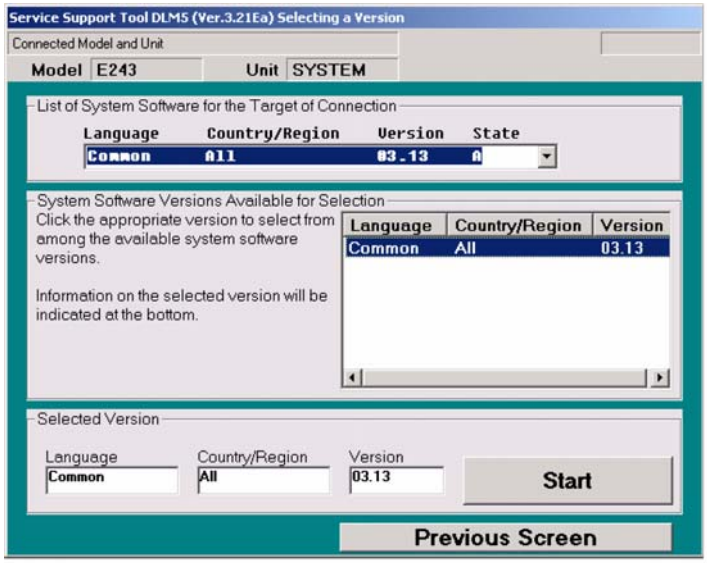
11) Click "System Software Download" on the Selecting a Job screen.
MEMO:
This machine does not use the "Upload the Backup Data" and "Download the Backup Data" functions not displayed on the Selecting a Job screen.


Service Support Tool DLM5 (Ver.3.21Ea) Selecting a Job
Connected Model and Unit
Model E243 Unit SYSTEM
List of System Software for the Target of Connection
Language Country/Region Version State
Common All 03.13 A
Selecting a SYSTEM Job
Click the job key for SYSTEM.
Write the system software to the machine.
System Software Download
Recover the system software that has been backed up.
Recover the Backup system
Save the backup data of the machine.
Upload the Backup Data
Write the saved backup data to the machine.
Download the Backup Data
Return to Main Menu

F-15-11

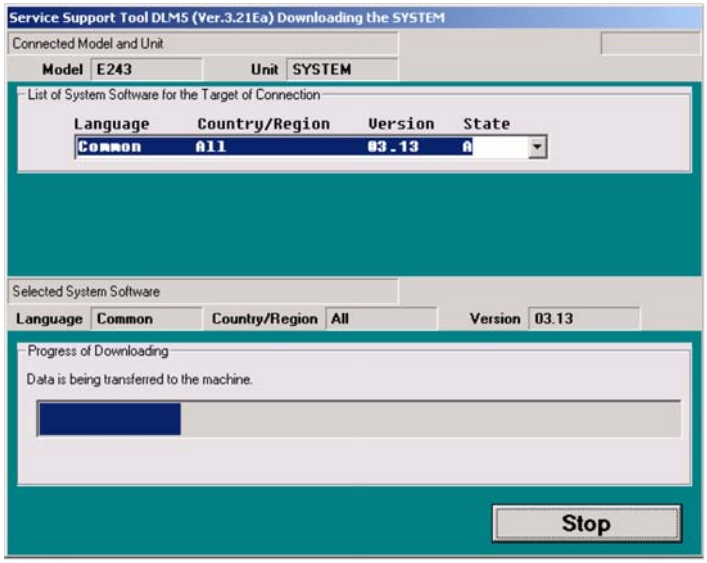
12) Select the version of the system software to download from the list. Check that the selected version is displayed in "Selected Version", and then click the "START" button.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com



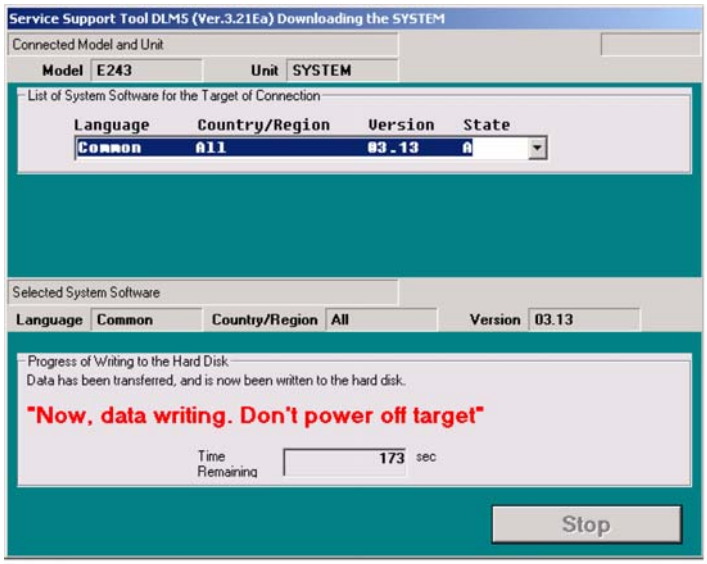
F-15-12

13) When downloading starts, the progress of downloading is displayed by the progress bar.



F-15-13

14) While the received data is being written to the flash ROM after completion of downloading, the following screen is displayed:

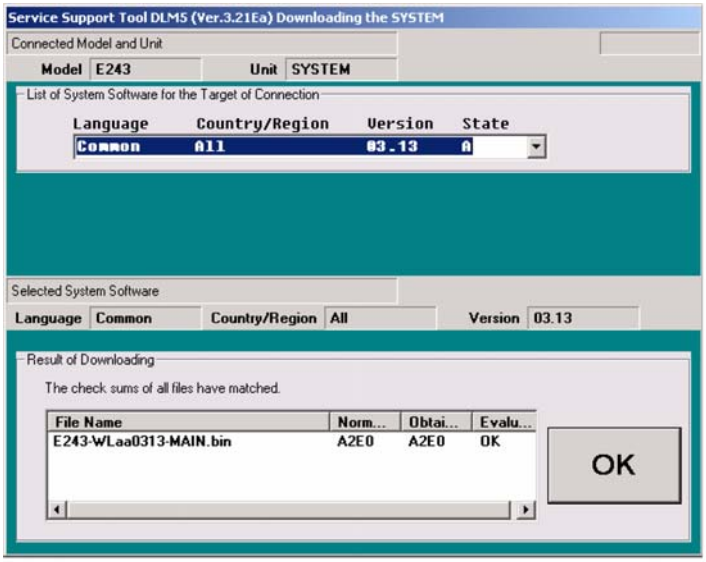


F-15-14

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

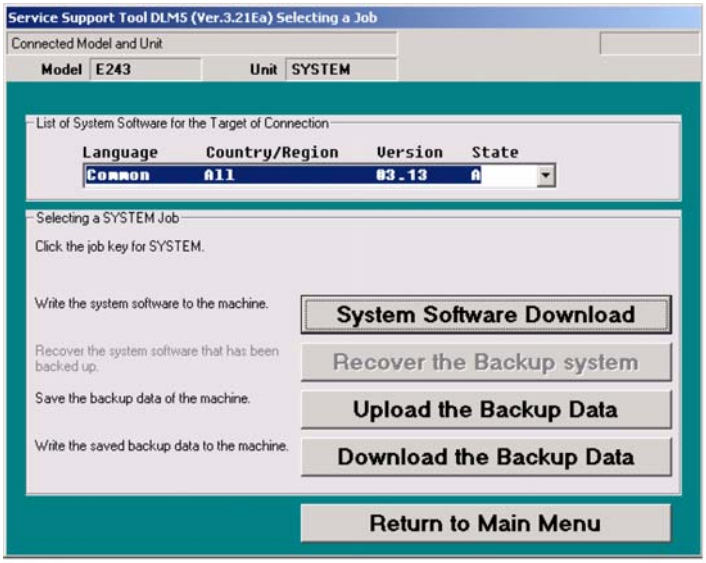
Never turn off the power switch of the machine while the data is being written to the flash ROM. If it becomes impossible to start this machine after turning its power switch off, the image processor PCB must be replaced.

15) When writing of the data to the Flash ROM is complete, its result is displayed. Click the OK button.



F-15-15

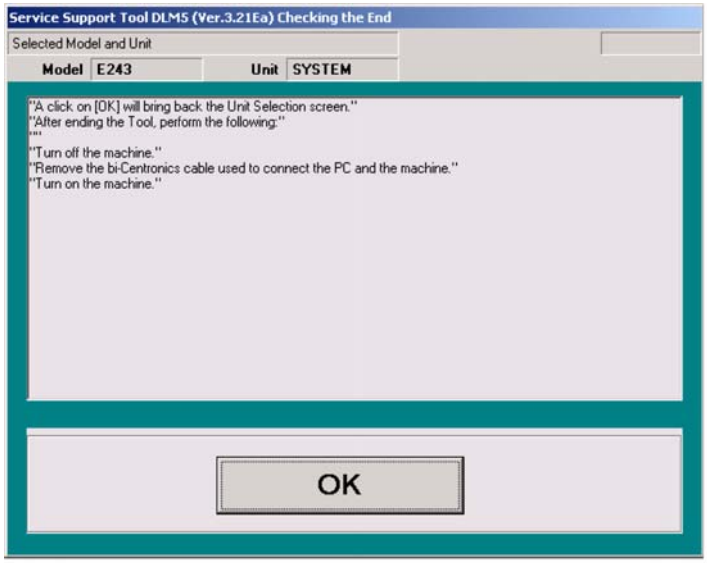
16) When the Selecting a Job screen appears, click "Return to Main Menu".



F-15-16

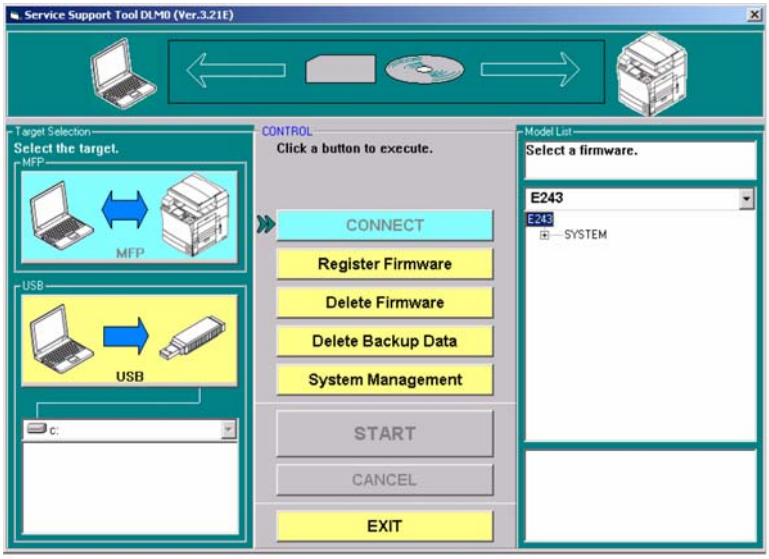
17) Click the "OK" button to return to the menu screen of SST.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com


Service Support Tool DLM5 (Ver.3.21Ea) Checking the End
Selected Model and Unit
Model E243
Unit SYSTEM
"A click on [OK] will bring back the Unit Selection screen."
"After ending the Tool, perform the following:"
"Turn off the machine."
"Remove the bi-Centronics cable used to connect the PC and the machine."
"Turn on the machine."
OK

F-15-17

18) Click the "EXIT" button to terminate SST.



F-15-18

19) Confirm the massage "ROM WRITE OK" indicated on the control panel of the host machine, and then turn off/on the main power switch.

15.3.2 Downloading the Boot Software

15.3.2.1 Downloading Procedure

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

To download the boot software, use the steps given for the system software.

15.3.3 Otehr Upgrade Methods

15.3.3.1 Downloading the PCL Software

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

To download the software for the option PCL board, use the steps given for the system software.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Chapter 16 Service Tools

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Contents

16.1 Service Tools.....16-1
16.1.1 Special Tools.....16-1

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

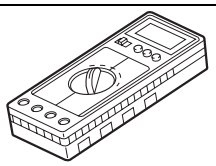
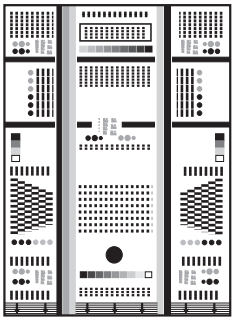
16.1 Service Tools

16.1.1 Special Tools

LaserBase MF6530 / / LaserBase MF6540PL / LaserBase MF6550 / KaserBase MF6560PL / / LaserBase MF6580PL

In addition to the standard tools set, you will need the following special tools for servicing of the machine:

T-16-1

Tool name	Tool No.	Rank	Shape	Uses
Digital multimeter	FY9-2002	A		For making electrical checks.
NA-3 Test Chart	FY9-9196	A		For checking and adjusting images.

Key to Notation (rank)
A: each service engineer is expected to carry one.

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Feb 22 2006

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com

Canon

Download Free Service Manual And Resetter Printer at http://printer1.blogspot.com